Intelligent Biology.

Getting messages through:

The cognition of influence with North Korea and East Asia

Report for the Joint Staff/J39 Strategic Multilayer Assessment (SMA)

Nicholas D. Wright

– v1 September 2018–



The research described in this report was sponsored by the United States Department of Defense Joint Staff/J39 Strategic Multilayer Assessment (SMA) branch. This work was conducted by Intelligent Biology.

Further information may be obtained from Intelligent Biology (www.intelligentbiology.co.uk).

TABLE OF CONTENTS

Contents

TABLE OF CONTENTS	II
LIST OF FIGURES	III
LIST OF TABLES	III
LIST OF BOXES	III
EXECUTIVE SUMMARY	IV
Questions (February 2018)	V
Questions (April 2018)	V
Chapter 1: Introduction	1
Influence and control across the range of conflict: Grey Zone to limited war	1
Thinking 'outside-in': the checklist for empathy	
Culture – East Asia and the West	
Basic framework for influence – the examples of deterrence and escalation management	
Recommendations	
Overview of this report	
PART I ANTICIPATING COGNITION IN NORTH KOREA AND REGIONAL POWERS	
Chapter 2: North Korean decision-making: putting yourself in their shoes	
Insights into Kim Jong-un's Cognition from his Public Speeches	
Self-interest, Opportunity and capability	
Fear	
Expectations, surprise and prediction error – a key North Korean tool	
Chapter 3: North Korea: cultural lenses and human commonalities	
Human commonalities: East Asian and Western responses to rewards and punishments	
Culture: More context-dependent East Asian than Western views	
Recommendations	
Chapter 4: Regional powers: putting yourself in their shoes	
Overview: Regional Actor Interests and the absence of "win-win"	
South Korea, Japan and extended influence	
China Recommendations	
PART II NORTH KOREA AS A GREY ZONE CHALLENGE	
Chapter 5: Grey Zone conflict - a new way to see the challenge	
The centrality of influence in the Grey Zone The region: latest historical episode of Grey Zone conflict	
o	
Chapter 6: North Korea as a Grey Zone challenge	
Multiple instruments of power	
Multiple timescales Multiple levels	
Multiple interpretations	
Multiple audiences	

LIST OF FIGURES

Figure 1.1: Peace, the Grey Zone and War	. 2
Figure 1.2: The Audience Decision Process	.5
Figure 1.3: The adversary's decision calculus in the US DoD Deterrence Operations Joint	
Operating Concept (2006)	.7
Figure. 2.1 Pavlovian effects: why deterrence is easier than compellence	13
Figure 2.2: Pavlovian effects. When threats provoke defensive attacks	15
Figure 2.3: Illustrating prediction errors (prediction error = actual event – expected event).	18
Figure 4.1: Four potential locations for Sino-U.S. escalation to war	26
Figure 4.2: Bandwidth of trust between ally and U.S.	30
Figure 5.1: Peace, the Grey Zone and War	35

LIST OF TABLES

LIST OF BOXES

Box 1.1: Checklist for Empathy	3
Box 5.1: What is the Grey Zone? The Five Multiples of the Grey Zone	. 35

EXECUTIVE SUMMARY

To cause intended effects—and avoid unintended effects—in the fiendishly complex regional environment surrounding the Korean peninsula, United States policymakers are required to understand both what motivates key actors *and* what type of strategic confrontation they face. To these ends, this report applies core insights from the cognition and neuroscience of decision-making, combined with data from historical and contemporary cases of decision-making such as the past 50 years of Democratic People's Republic of Korea (DPRK) military-diplomatic campaigns. Two broad sets of conclusions emerge.

The first arise from analysing core cognitive dimensions of what motivates the DPRK and key regional actors. These include:

(a) Managing unpredictability is a central challenge for U.S. policymakers: The DPRK has skilfully manipulated unexpectedness to maximise the impact of its diplomatic and military actions for over 50 years – U.S. policymakers must manage those effects on themselves, U.S. domestic audiences and allies. For allies such as the Republic of Korea (ROK) or Japan, the U.S. must also manage the unexpectedness of its own actions, as unpredictability often damages the trust on which rests U.S. credibility and extended deterrence.

(b) Fear drives much regional behavior – and because the DPRK, ROK, U.S., Japan, China have fundamentally different and mismatched fears no single solution can address them. For instance, a key DPRK fear is personal death for the leadership; a key Japanese fear is China's rise; China's overriding fear is the U.S.; the U.S. fears DPRK intercontinental nuclear weapons. Only coordinated action on all fronts can address these fears.

(c) Fairness: Rejection of perceived injustice fuels Sino-Japanese and ROK-Japanese antagonism, as well as Japanese concerns over abductions – all destabilizing any regional peace process. Any deal must be perceived as fair or it likely won't stick.

Second, the U.S. must understand what type of conflict it faces – a "Grey Zone" conflict. North Korea has conducted "Grey Zone" conflict for most of the past half century, literally neither fully at peace nor war. Grey Zone conflict also increasingly characterises regional competition between China, Japan and the ROK. This provides a powerful new lens to understand and manage this devilishly difficult DPRK confrontation and its regional ramifications. Managing Grey Zone conflict requires particular tools. It is necessarily *limited* conflict. Thus, the central aim is to *influence* the decision-making of adversaries and other key audiences, rather than removing their capacity to choose using brute force in itself. I apply evidence-based tools for influence in the Grey Zone (Wright 2017, Cognition in the Grey Zone), examined in the historical and current cases noted above. The U.S. retains a portfolio of unused Grey Zone actions it can threaten or apply to the DPRK, e.g. extensive information operations in the DPRK to decrease regime power. Understanding the Korean challenge as a Grey Zone conflict helps the U.S. anticipate and manage regional implications with allies (e.g. ROK and Japan) as well as competitors (e.g. China and Russia).

I next summarise the report's further contributions to the specific question sets.

QUESTIONS (FEBRUARY 2018)

What are the most viable political-military options to achieve U.S. strategic objectives? Potential U.S. options include: (a) continued containment/deterrence; (b) acceptance of DPRK nuclear weapons that don't threaten the U.S.; or (c) military prevention. *Of these options, only continued containment/deterrence will likely maintain US regional influence.*

What are the strategic implications (political, security, economic) for U.S. objectives and relative international influence in the short (0-2 years) and longer (7+ years) terms?

(a) Continued containment/deterrence enables a straightforward narrative for the continued U.S. presence in ROK and alliance with Japan.

(b) Acceptance would cause a disastrous loss of Japanese and ROK trust in the U.S., without removing the threats they perceive from either the DPRK or a rising China. U.S. relative influence over the ROK and Japan would decrease as they sought greater autonomous security (potentially including nuclear weapons) or even in the ROK case accommodation with China.

(c) Military prevention would have the most uncertain outcomes. If it did not incur sizeable ROK or Japanese casualties from DPRK retaliation it may be perceived as a success and increase U.S. influence. However, sizeable ROK (e.g. artillery bombard Seoul) and/or Japanese (e.g. missiles) casualties would likely be blamed on a U.S. that acted to remove a nuclear threat to *itself* at the cost of allied civilian lives – **weakening US legitimacy with allies.**

QUESTIONS (APRIL 2018)

(I) Regional Actor Interests

I apply the "Checklist for Empathy" method (Wright, 2017) to regional actors, which operationalises core cognitive motivations such as fear, fairness and self-interest. Key findings include those described above. For instance, **fear drives much regional behavior – and because the DPRK, ROK, U.S., Japan, China have fundamentally different and mismatched fears no single solution can address them.** I describe further findings below.

(II) DPRK Denuclearization

The "checklist for empathy" method anticipates key redlines and inflection points for the DPRK. The bottom line is that **Final, Fully Verified Denuclearization (FFVD) is not likely achievable short of large-scale U.S. preventive military action as it threatens death to key DPRK decision-makers either directly or indirectly.** The analysis does, however, offer points to stress in ongoing negotiations. Three key DPRK motivations are:

A <u>first</u> DPRK motivation is <u>fear of personal death</u> for Kim Jong-un, the Kim family and key regime members (e.g. the Organization and Guidance Department; OGD). There is a long history of assassinations and attempted assassinations of senior DPRK and ROK officials. Here, such death may occur in three main ways:

(a) "Gaddafi" – The DPRK loses the ability to deter outside intervention in medium term;

- (b) "<u>G</u>lasnost"¹ Regime softening leads to collapse in medium term;
- (c) "lgnorable" without nuclear weapons, the DPRK loses ability to obtain aid and collapses in the medium term

These three causes of fear mean the DPRK will be unlikely to undertake FFVD. However, they also suggest points to consider during negotiations. In all 3 cases, a crucial issue is how far the DPRK **trusts** that the ROK/US will ensure key peoples' **personal safety** before nuclear weapons are surrendered and/or reforms undertaken. DPRK trust in US/ROK assurances is very difficult to achieve—not least because new administrations in such democratic states can reverse predecessors' policies—but one should, as far as possible, build trust with the DPRK using evidence-based methods such as trusted messengers.

The U.S. can also stress to the DPRK that continued nuclear weapons programmes will mean ROK and Japan will develop and deploy increasingly sophisticated rapid targeting for the "kill chain" – and this is dual use for decapitation. This moves the region to a situation where ever more countries will have finger on a trigger that could lead to the leadership's personal death.

A <u>second</u> DPRK motivation is the <u>opportunity for long-term regime continuance</u>, achieved via playing off great powers and receiving aid. The regime requires a plausible path forward – and this likely involves aid rather than trade as a source of income.

A <u>third</u> DPRK motivation is <u>self-interest</u>: In negotiations, the U.S. may consider offering things that cannot easily be reversed, so they rely less on DPRK trust in the U.S. For instance, one might offer to build large expensive facilities in the DPRK that benefit the DPRK (e.g. factories, railways). These will also act to modernize DPRK society and thus over the long-term destabilize DPRK regime control.

The "checklist for empathy" method also assesses <u>regional attitudes</u>. Considering the nuclear issue alone, one would expect **China and Russia** to disfavour nuclear Koreas as they have for half a century, as it devalues their own nuclear arsenals' relative advantage. Further, China fears growing Japanese and ROK precision strike capabilities to counter DPRK threats, illustrated by recent Chinese reactions to Terminal High Altitude Area Defense (THAAD) missile defense placement in the ROK. However, one cannot consider only the nuclear issue alone – as described below the broader Sino-U.S. and Russo-U.S. relationships becoming increasingly zero sum, so that a U.S. "win" denuclearising the DPRK may become a "loss" to be prevented or leveraged in the broader global Grey Zone competition.

Finally, applying the lens of Grey Zone conflict suggests ways to influence the DPRK: Grey Zone competition involves multiple societal levels, in particular state and population levels. Regime stability is paramount, and the U.S. can threaten the DPRK with concerted direct information operations targeting its population.

- Build and enhance messengers to reach the DPRK population: E.g. memory sticks; DVDs; radio; through family links to the ROK or China.
- Create messaging specifically for DPRK audiences: Programming content that directly relates to the lives of north Koreans mostly entertainment or news, but gradual anti-regime

¹ Kim Jong-un may or may not himself fear "Glasnost". There can be inter-generational and inter-individual differences. For instance, Soviet Premier Gorbachev differed from his predecessors, and Kaiser Wilhelm II who led Germany into World War I differed from his liberal father who died shortly after taking the throne.

content. Similarity of audience and messenger is key, so use north Korean and south Korean content.

• Understand the North Korean audience – are there key segments that can be mobilized?

(III) Regional Non-Proliferation

What is striking about proliferation globally since 1945 is that more hasn't occurred. Indeed, the ROK had an advanced nuclear weapon program in the 1970s, whilst Japan has had the capability to build nuclear weapons for decades. Previous work on the psychology of proliferation has identified drives to acquire nuclear weapons from factors captured by our "checklist for empathy", in particular identity ("oppositional nationalism"), fear and status. Another key factor are "norms" against acquisition, where such norms are a key factor in Grey Zone conflict.

U.S. acceptance and accommodation of the DPRK as a nuclear weapons state in the near term would greatly diminish ROK and Japanese trust in the U.S. – and in light of their broader fears about China's rise this would markedly increase the risk of proliferation in both cases.

If the U.S. continues containment/deterrence of the DPRK, then China and Russia will likely continue their general support for non-proliferation. This is because further proliferation would reduce their own nuclear arsenals' relative advantage.

(IV) Northeast Asia and Western Pacific Regional Stability

The region is moderately, but increasingly, unstable due to mismatched motivations and perceptions between key actors. Instability arises in large part from China's rise shifting power balances, and because of the global shift to an era of Grey Zone competition between great powers such as China, Russia and the U.S..

Against this background, the main DPRK-related threats to regional stability are the responses that DPRK actions provoke in Japan and the ROK – and the responses in turn that these provoke in China and the DPRK. In particular, the ROK and Japan will likely develop and deploy more sophisticated rapid targeting for the DPRK "kill chain", but this is dual-use against China. China greatly disliked THAAD, and if the DPRK continues its nuclear development then China faces more such technology. This feeds, for example, into the Sino-Japanese security dilemma (spiralling fears of each other) and fairness dilemma (spiralling feelings each other side's actions are unjust).

Japan and ROK: The U.S. must manage unpredictability to build trust and credibility. Warn of actions if possible. Build bandwidth of trust and contact between the U.S. and each actor, by increasing contact in Mil-Mil, Intel-Intel, political and social channels.

China: The U.S. must make clear that continued DPRK nuclear programmes that threaten the ROK and Japan will lead to more THAAD-like and conventional ROK and Japanese capabilities that threaten China – and that these are not aimed at China. Help mitigate the Sino-Japanese fairness dilemma.²

² A strategy to address the this fairness dilemma is described in: Nicholas D Wright and James L. Schoff, "China and Japan's Real Problem: Enter the Fairness Dilemma," *The National Interest*, November 2, 2014.

(V) Strategic Outcomes

Regarding a win-win scenario? Win-win is perceived. It is not possible as we, sadly, move towards zero-sum U.S.-Chinese and U.S.-Russian thinking.

How does the U.S., with partners, best contest adversary operations - and best deter conflict? Recognise that the U.S. faces a **Grey Zone** competition and build the policies and capabilities necessary to face Grey Zone competition. Recognise that deterrence, compellence and escalation management are all just examples of influence – and it is influence that is the key to strategy in the Grey Zone. Create influence using evidence-based methods³ tailored to the "five multiples" of the Grey Zone: multiple instruments of power, multiple societal levels, multiple audiences, multiple interpretations and multiple timeframes.

³ These are detailed in practically usable way in: Nicholas D. Wright, "From Control to Influence: Cognition in the Grey Zone" (Birmingham, UK: University of Birmingham, UK, April 2017), www.nicholasdwright.com/publications.

Chapter 1: Introduction

- 1.1. To cause intended effects, and avoid unintended effects, policymakers should understand what motivates key actors *and* what type of strategic confrontation they face. To help achieve both these ends, here we apply core insights from the cognition and neuroscience of decision-making, combined with data from historical and contemporary cases of decision-making such as the past 50 years of Democratic People's Republic of Korea (DPRK) military-diplomatic campaigns.
- 1.2. This introduction discusses five areas:
 - The DPRK has conducted Grey Zone warfare for most of the past half century – and influence is key to strategy in the Grey Zone. U.S. policymakers aim to deter the DPRK from conventional provocations, compel the DPRK to give up nuclear weapons and manage DPRK escalation – and these are all examples of influence. U.S. strategy requires both *influence* and *control* – neither alone is sufficient for U.S. policymakers to achieve intended effects and avoid unintended effects related to the Korean peninsula.
 - Understanding the audience is critical for influencing them. One can help put oneself in the shoes of the audience using the "checklist for empathy", a set of practical questions based in robust cognitive evidence.
 - How might culture matter when Westerners try to put themselves in the shoes of an East Asian individuals?
 - How to use the "checklist for empathy" to plan for deterrence, escalation management and other cases of influence.

INFLUENCE AND CONTROL ACROSS THE RANGE OF CONFLICT: GREY ZONE TO LIMITED WAR

- 1.3. North Korea has conducted "Grey Zone" conflict for most of the past half century, literally neither fully at peace nor war. Grey Zone conflict also increasingly characterises regional competition between China, Japan and the ROK. Managing Grey Zone conflict requires particular tools. It is necessarily *limited* conflict. Thus, the central aim is to *influence* the decision-making of adversaries and other key audiences, rather than removing their capacity to choose using brute force in itself.
- 1.4. Strategy is the art of creating power. Power consists of the ability to influence another's choice or to exert control by removing their capability to choose.⁴ I define influence as a means to affect an audience's behaviour, perceptions or attitudes. Influence can be achieved by deterrence, persuasion, or the use of hard or soft power. Influence does not only include "soft" means, but also the use or threat of hard power.

⁴ Richard Lee Armitage and Joseph S. Nye, *CSIS Commission on Smart Power: A Smarter, More Secure America* (CSIS, 2007). p. 6 'Power is the ability to influence the behavior of others to get a desired outcome. Historically, power has been measured by such criteria as population size and territory, natural resources, economic strength, military force, and social stability' For discussion of the distinction between influence and control, see e.g. Thomas Crombie Schelling, *Arms and Influence* (Yale University Press, 1966). Ch. 1.

1.5. Influence, not just control, is a principal means for U.S. decision-makers to achieve intended effects and avoid unintended effects throughout the range of conflict, from Grey Zone, through limited war and total⁵ war (Fig. 1.1). This is the case for offense, defense and deterrence.

TOTAL WAR

LIMITED WAR

Crises	Many smaller Single/few actions large actions	GREY ZONE
Crises	"Normal" competition (e.g. economic competition, espionage)	PEACE

Figure 1.1: Peace, the Grey Zone and War

- 1.6. First consider Grey Zone conflict.⁶ Grey Zone conflict is necessarily limited conflict, sitting between "normal" competition between states and what is traditionally thought of as war. Globally, we are returning to an era of higher intensity Great Power competition than seen since the end of the Cold War. But we aren't returning to the Cold War even though the Cold War was itself, as its very name suggests, a Grey Zone conflict. Instead, U.S. policymakers must recognize we are entering a new era of Grey Zone competition with its own character with new technology, that is more multipolar and is nationalistic rather than ideological.
- 1.7. Second, consider limited war. Influence is crucial to keep limited wars limited, for example through intra-war deterrence. In limited war with the DPRK it will be in U.S. interests that war does not escalate to war with other great powers. Indeed, the 1950-53 Korean War was the prototypical Cold War limited war.
- 1.8. The first step to creating influence is understanding the audience's decision calculus.

THINKING 'OUTSIDE-IN': THE CHECKLIST FOR EMPATHY

- 1.9. To influence an Afghan farmer not to grow poppy, the influencer must consider that course of action and its alternatives from the audience's perspective.⁷ If the aim is to deter a hostile State, i.e. influence it not to act, then the influencer must estimate how the hostile State perceives the costs and benefits of acting and of not acting.⁸
- 1.10. Embracing an outside-in perspective—a mindset that starts with the audience and focuses on creatively delivering something it values—brings benefits relative to an inside-out mindset focused on internal processes that push out products to the

⁵ Albeit with the caveat that truly total war between the largest nuclear weapons states, primarily the U.S. and Russia, which essentially involved the end of all humans involved clearly leaves no humans left to influence. ⁶ Wright, "From Control to Influence."

⁷ This subsection draws on Wright. Please see that report for detailed discussion of the rationale and how to implement such influence.

⁸ Lawrence Freedman, *Deterrence* (Cambridge: Polity, 2004).

audience.⁹ In business, this has been a staple of marketing since Harvard Marketing professor Theodore Levitt's 1960 article Marketing Myopia.¹⁰ In a more recent study, customer-driven companies doubled the shareholder returns compared to shareholder-driven ones¹¹ and the advantages are even more marked in the most challenging and turbulent markets.¹² In international relations, a key recommendation of Joseph Nye's seminal 2004 book on power and influence is, "To put it bluntly, to communicate more effectively, Americans need to listen."¹³

- 1.11. Influence aims to shape behaviour either immediately or in the future, which requires understanding the audience's decision-making process as shown in Figure 1.2. The decision the audience faces must be at the heart of planning for influence. Influence is affecting an audience's decision-making process, where that audience can decide between options. The influencer should explicitly estimate that action's perceived costs and benefits and the perceived costs and benefits of alternatives. This includes realistic, conscious and unconscious as well as "irrational" motivations, for example fear, fairness and identity (e.g. Box 1.1).
- 1.12. Thinking outside-in seems obvious, yet businesses and governments often fail to do it. One important reason for this is the unavoidable force in any bureaucracy to focus internally on process and known routines.¹⁴ Humans are also predisposed to think egocentrically.¹⁵
- 1.13. Outside-in thinking is very hard. Box 1.1 shows one simple, practical approach to achieving this that this report uses to examine DPRK and regional powers' decision-making. Such practical questions as set out in the checklist below can help to estimate the perceived costs and benefits of an action from an audience's perspective based on a realistic understanding of human motivation and decision-making, coupled with the specific context.

Box 1.1: Checklist for Empathy

A set of practical questions can help to estimate the audience's perceived costs and benefits for their potential alternative actions in a given context, i.e. help complete Figure 1.2. These may include:

Self-interest: "What material benefits may they gain or lose?"¹⁶ The importance of self-interest was shown by the switching allegiances of

⁹ The evidence is reviewed in Wright, "From Control to Influence."

¹⁰ Levitt, T. 'Marketing Myopia', *Harvard Business Review*, July-August, 1960, p.45

¹¹ Ellsworth, R. (2002) Leading with Purpose, The New Corporate Realities, Stanford Business Books

¹² Gulati, R. (2009) 'Reorganise for resilience: Putting customers at the centre of your organisation', Harvard Business Press

¹³ Nye, JS. (2004) Soft Power: The Means to Success in World Politics, Public Affairs

¹⁴ Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd ed. (Pearson, 1999).

¹⁵ M. H. Bazerman et al., "Negotiation," *Annual Review of Psychology* 51 (2000): 279–314, https://doi.org/10.1146/annurev.psych.51.1.279.

¹⁶ Raymond Paternoster, "How Much Do We Really Know about Criminal Deterrence?," *The Journal of Criminal Law and Criminology*, 2010, 765–824; J.H. Kagel and A.E. Roth, "The Handbook of Experimental Economics," *Princeton, NJ*, 1995.

	Sunni groups during the 2007 Surge in Iraq, which involved U.S. rewards and threats of punishment. ¹⁷
\succ	Fairness : "How fair will it be seen from the audiences' perspectives?"
	Humans typically pay costs to reject unfairness and pursue
	grievances. ¹⁸
	Fear: "Do they fear for their security and why?" ¹⁹
	Identity: "What are their key identities?" Humans are driven to form
	groups ("us", the "in-group") that are contrasted against other groups
	("them", the "out-group"). Individuals also often hold multiple
	overlapping identities. ²⁰
\succ	Status: "How may this affect the audience's self-perceived status?"
	E.g. For key audiences in Afghanistan, joining the Taliban had high
	status. ²¹
\succ	Expectations: "What are their key expectations, and what may
	violate them?" ²² The more unexpected a perceived event is, the
	bigger its psychological impact. ²³
	Context, opportunity and capability: "What opportunities and
	capabilities does the audience perceive it has for its potential
	alternative actions?" E.g. an intervention to encourage someone to
	pay taxes who is actively avoiding paying taxes, differs to that for
	someone who feels unable to use an online system.

CULTURE - EAST ASIA AND THE WEST

1.14. Another challenge for U.S. planners trying to place themselves in the shoes of others half a world away is culture. Does strategic thinking differ between East Asian countries, such as North Korea or China, and the U.S.? Does what is common sense and intuitively plausible really differ between such cultures? Identifying such differences would help tailor influence strategies. Many influential voices argue, for instance, that strategic thought differs between China and the West, rooted in millennia of cultural difference leading to different worldviews. Henry Kissinger wrote in *'On China'* that 'No other country can claim so long a continuous civilization, or such an intimate link to its ancient past and classical principles of strategy and statesmanship', and argued its cultural tradition shaped leaders such as Mao Zedong, Wen Jiabao and Hu Jintao.²⁴ The authoritative Chinese military textbook *The Science of Military Strategy* states that 'The cultural tradition of all nations,

¹⁷ 'Losing Iraq' July 29th 2014, Frontline, PBS

¹⁸ Colin F Camerer, *Behavioral Game Theory: Experiments in Strategic Interaction*, vol. 9 (Princeton University Press Princeton, NJ, 2003).

 ¹⁹ Posen, "The Security Dilemma and Ethnic Conflict"; Jervis, "Was the Cold War a Security Dilemma?"
 ²⁰ Nicholas Sambanis, Jonah Schulhofer-Wohl, and Moses Shayo, "Parochialism as a Central Challenge in Counterinsurgency," *Science* 336, no. 6083 (May 18, 2012): 805–8, https://doi.org/10.1126/science.1222304.
 ²¹ Arturo Munoz, U.S. Military Information Operations in Afghanistan (Rand Corp., 2012).

²² Crombie Schelling, T. (1966) Arms and Influence, Yale University Press; Smoke, R. (1977) War: Controlling Escalation, Harvard University Press.

 ²³ Nicholas D. Wright, "The Biology of Cooperative Decision-Making: Neurobiology to International Relations," in *Handbook of International Negotiation*, ed. Mauro Galluccio (Springer International Publishing, 2015), 47–58.
 ²⁴ Henry Kissinger, *On China* (Penguin, 2011). Quote from p. 2, see also e.g. pp. 3, 103, 490.

especially the national cultural psychology has significance on the process of development of strategic theories.²⁵

1.15. But whilst it has been devilishly difficult to determine whether, and how, cultural differences affect behavior, in this report Chapter 4 applies robust findings from cross-cultural cognitive science. This provides an extra, independent source of evidence on cross-cultural differences, which I then explore further using cross-cultural analyses from doctrine, interviews and historical cases. I discuss cross-cultural factors in Chapter 4.

BASIC FRAMEWORK FOR INFLUENCE – THE EXAMPLES OF DETERRENCE AND ESCALATION MANAGEMENT

- 1.16. U.S. policymakers aim to deter the DPRK from conventional provocations, compel the DPRK to give up nuclear weapons and manage DPRK escalation and these are all examples of influence. Just aiming to deter the DPRK is not enough.
- 1.17. Influence aims to affect an audience's decision process, which is shown in Fig. 1.2. The account of the audience's decision process used here is operationalizable for planning, for instance being entirely compatible with U.S. concepts such as the Deterrence Operations Joint Operating Concept (DO JOC).²⁶ To provide a focus for the DPRK case, I highlight two important cases of influence: deterrence and escalation management.

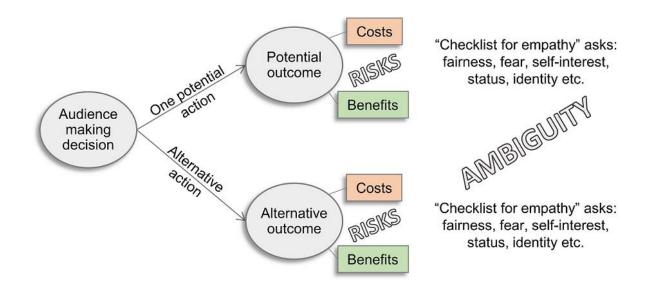


Figure 1.2: The Audience Decision Process. The audience's decision calculus must be at the heart of planning for influence. Practical tools, based in evidence, can help put oneself in the audience's shoes (e.g. the "checklist for empathy" described in Box 1.1 above).

1.18. Deterrence and escalation management are intimately related and are both cases of influence.

²⁵ Guangqian Peng and Youzhi Yao, *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005). p. 128.

²⁶ US DoD, "Deterrence Operations Joint Operating Concept," *Version* 2, 2006.

- 1.19. In U.S. thinking, deterrence is influencing an adversary so that they decide not to act rather than to act (see e.g. Figs. 1.2 and 1.3).
- 1.20. Escalation can be defined as an increase in the intensity or scope of confrontation considered significant by one or more parties. We can consider three mechanisms of escalation: deliberate, inadvertent and accidental.²⁷ Escalation may be considered inadvertent when an actor's intentional actions are unintentionally escalatory. In deliberate escalation the degree of escalatory impact on the receiver was intended. In accidental escalation, the action itself was unintended. Management of inadvertent escalation is managing the influence of one's actions on the those receiving them. Management of deliberate escalation by the adversary involves deterrence.
- 1.21. Deterrence and escalation management can work together and can be antagonistic. Actions taken in order to deter an adversary can contribute to escalation management, or may work against escalation management. How? If an adversary is deliberately escalating, then one can potentially deter further escalation by influencing the adversary's perceived cost/benefit judgement. However, if an adversary is escalating due to inadvertent escalation, then taking actions to deter the adversary through threatened punishment may make them fear further for their security and thus lead them to escalate further. It can escalate the spiral of tension between them.
- 1.22. The scholar Robert Jervis neatly captured the tension between spirals and deterrence²⁸: are we in the run up to World War I (where more defensively motivated actions led or contributed a spiral of fear driving towards war); or are we in the run up to World War II where we needed to deter Hitler?
- 1.23. Chinese thinking may be highly problematic with respect to such an understanding of escalation.²⁹ This arises because compared to much U.S. thought, Chinese strategic thinking considers escalation as more deliberate and controllable, and also considers signalling as more effective so that the message intended to be sent is the message that is received. Thus, if the Chinese believe escalation is much more the product of deliberate (rather than inadvertent) mechanisms, they will be much more likely to seek to deter that escalation and so worsen inadvertent escalation.

Influence: The case of deterrence

1.24. In U.S. thinking, deterrence is influencing an adversary so that they decide not to act rather than to act (Fig. 1.2). Deterrence may require that the adversary chooses not to act at all (e.g. this is standard in nuclear deterrence thinking) or they may only act

 ²⁷ For discussion of such definitions see Forrest E. Morgan et al., "Dangerous Thresholds" (Rand, 2008).
 ²⁸ Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976).

²⁹ For a review see Nicholas D. Wright, Mindspace: Cognition and space operations, Intelligent Biology, London, 2018. Also Alison A. Kaufman and Daniel M. Hartnett, *Managing Conflict: Examining Recent PLA Writings on Escalation Control* (VA: Center for Naval Analyses, 2016); Morgan et al., "Dangerous Thresholds"; Alastair Iain Johnston, "The Evolution of Interstate Security Crisis-Management Theory and Practice in China," *Naval War College Review* 69, no. 1 (2016): 28.

at some acceptably low frequency (e.g. in some conventional applications or as seen in Israeli thinking³⁰).

- 1.25. There is a a fundamentally cognitive dimension to deterrence
- 1.26. The cognitive foundation of deterrence is acknowledged by numerous U.S. and other Western official and scholarly documents.³¹ One prominent U.S. DoD definition specifies that "Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction" [emphasis mine]³². The Deterrent Operations Joint Operating Concept also prominently states that "The central idea of the DO JOC is to decisively influence the adversary's

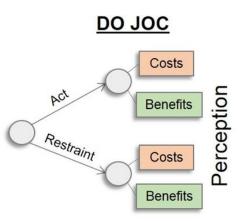


Figure 1.3: The adversary's decision calculus in the US DoD Deterrence Operations Joint Operating Concept (2006).

decision-making calculus...."³³ Furthermore, as shown in Figure 1.3, which I adapt from the core concept and illustration in the DO JOC, the adversary's decision calculus is clearly shown as a decision between options (each of which has costs and benefits), and in which perception is key. The DO JOC goes on to state that "An adversary's deterrence decision calculus focuses on their perception of three primary elements: The *benefits* of a course of action; The costs of a course of action; The consequences of restraint' [emphasis in original].

Influence: The case of escalation management

1.27. Escalation can be defined as an increase in the intensity or scope of confrontation considered significant by one or more parties. Escalation may be deliberate, inadvertent or accidental.³⁴ Escalation management has a fundamentally cognitive component for both deliberate and inadvertent escalation.

Managing deliberate escalation - a fundamental cognitive dimension

Deterrence is the primary means to manage deliberate escalation. The cognitive 1.28. dimensions of deterrence are discussed above.

³¹ Wright ND (forthcoming) The Neurobiology of Deterrence: Lessons for U.S. and Chinese Doctrine in Eds. Knopf J and Harrington A "Behavioral Economics and Nuclear Weapons", University of Georgia Press ³² Department of Defense Dictionary of Military and Associated Terms, Joint Pub 1-02. This definition was present in the 1994 edition up to 2011, but not by 2016. it now defines deterrence as "The prevention of action by the existence of a credible threat of unacceptable counteraction and/or belief that the cost of action outweighs the *perceived* benefits" [emphasis mine]. ³³ DoD, "Deterrence Operations Joint Operating Concept." p. 3

³⁰ Mark Vinson, "An Israeli Approach to Deterring Terrorism," PRISM Security Studies Journal 5, no. 3 (2014): 61-75. Thomas Rid, "Deterrence beyond the State: The Israeli Experience," Contemporary Security Policy 33, no. 1 (April 1, 2012): 124-47, https://doi.org/10.1080/13523260.2012.659593.

³⁴ For discussion of such definitions see Morgan et al., "Dangerous Thresholds."

Managing inadvertent escalation – a fundamental cognitive dimension

- 1.29. Escalation may be considered inadvertent when an actor's intentional actions are unintentionally escalatory, that is the degree of escalation was not deliberate and the action was not accidental. I highlight three cognitive aspects below.
- 1.30. Firstly, fear in action-reaction 'spirals'. 'Spiral' dynamics or the 'security dilemma' are invoked to explain many escalating peacetime action-reaction spirals of political hostility and military preparations³⁵, as well as inadvertent escalation during limited war.³⁶ Broadly speaking, such a spiral or security dilemma arises from fear or uncertainty of the other's motivations and capabilities, where precautionary or defensively motivated measures are understood or misperceived as offensive threats that can lead to countermeasures in kind.³⁷
- 1.31. Much scholarship places fear at the heart of action-reaction spirals.³⁸ As Robert Jervis wrote, 'to determine whether a security dilemma existed ... one or both sides should have been deeply fearful that the other side was aggressive or would become so in the future.'³⁹ Or as Barry Posen concludes an analysis of the security dilemma, to understand the odds of conflict one must ask: "Which groups fear for their physical security and why?'⁴⁰ What 'fear' means varies widely: for some scholars being fundamentally biologically or psychologically with culture shaping its expression⁴¹; whilst for other scholars fear clearly matters but seems to fall out of rational explanations in terms of, for example, uncertainty over another's type.⁴² However, at its core fear remains as an unpleasant emotion or apprehension caused by threat or danger.
- 1.32. Fear is captured by the "checklist for empathy" this report uses. Avoiding or mitigating ROK-DPRK, Sino-U.S. or Sino-Japanese spirals is a core U.S. challenge.
- 1.33. Secondly, the thresholds over which an action is considered escalatory are fundamentally subjective they exist in the minds of observers.⁴³
- 1.34. Thirdly, the legitimacy or proportionality of reactions have a fundamentally subjective in the mind of the observer.⁴⁴

³⁵ Jervis, *Perception and Misperception*. Ch. 3 esp. pp. 62-76. Andrew Kydd, "Game Theory and the Spiral Model," *World Politics* 49, no. 3 (April 1997): 371–400, https://doi.org/10.1353/wp.1997.0012. Charles L. Glaser, "The Security Dilemma Revisited," *World Politics* 50, no. 1 (October 1, 1997): 171–201.

³⁶ Barry Posen, *Inadvertent Escalation: Conventional War and Nuclear Risks* (Cornell University Press, 1991). Chapter 1. Posen also discusses militaries' offensive bent and accidents, not covered here.

³⁷ Thomas J. Christensen, "China, the U.S.-Japan Alliance, and the Security Dilemma in East Asia," *International Security* 23, no. 4 (April 1, 1999): 49–80.

³⁸ Ken Booth and Nicholas Wheeler, *Security Dilemma: Fear, Cooperation, and Trust in World Politics*, First Edition (Basingstoke: Palgrave Macmillan, 2008). Ch. 3 for a review.

³⁹ Jervis, "Was the Cold War a Security Dilemma?"

⁴⁰ Posen, "The Security Dilemma and Ethnic Conflict."

⁴¹ Booth and Wheeler, *Security Dilemma*. Ch. 3. Lebow Richard Ned, *A Cultural Theory of International Relations* (Cambridge University Press, 2008). p. 119.

⁴² E.g. Andrew H. Kydd, *Trust And Mistrust In International Relations* (Princeton University Press, 2005). Fear is neither indexed nor clearly defined, but figures prominently. Part II is entitled 'Fear and the Origins of the Cold War' in which fear is central to Ch. 3 on 'The Spiral of Fear' and the subsequent historical descriptions. Charles L. Glaser, *Rational Theory of International Politics: The Logic of Competition and Cooperation* (Princeton University Press, 2010). Again fear is not indexed or defined, but for example features in the description of signalling malign intentions pp. 70-1.

⁴³ Morgan et al., "Dangerous Thresholds."

⁴⁴ Schelling, Arms and Influence.

RECOMMENDATIONS

- 1.35. Deterrence and escalation management are intimately related, neither alone is sufficient for the U.S. to cause intended and avoid unintended effects in confrontations with the DPRK and both should be considered together within the framework of *influence*.
- 1.36. Both deterrence and escalation management have a fundamentally cognitive dimension and policymakers should adopt a realistic account of human decision-making.
 - The "checklist for empathy" provides one simple, operationalisable example, based in evidence.
- 1.37. Strategy should adopt an "outside-in" mindset, which places the audience's decisionmaking at the heart of the influence strategy.
- 1.38. Culture should be taken seriously to understand the audience.

OVERVIEW OF THIS REPORT

- 1.39. Part I examines how to anticipate the decision-making of North Korea and regional powers, based around a realistic account of human decision-making operationalized by the "checklist for empathy".
- 1.40. Part II provides a new lens through which to view the challenges presented by the DPRK as a Grey Zone conflict.

PART I ANTICIPATING COGNITION IN NORTH KOREA AND REGIONAL POWERS

Part I uses a realistic account of human decision-making to examine the decision-making of North Korea and regional powers. Chapter 2 begins by examining DPRK decision-making, using the "checklist for empathy". Chapter 3 examines how potential cultural differences between East Asia and the West may affect decision-making – drawing on the large body of work from cross-cultural cognitive science as well as literature examining strategic thought. Chapter 4 examines the decision-making of other regional powers using the "checklist for empathy".

Chapter 2: North Korean decision-making: putting yourself in their shoes

- 2.1. Putting yourself in the shoes of North Korean decision-makers is notoriously difficult. The regime has been deliberately opaque, even during the Cold War to its "partners" the Chinese and Soviet Union. Here we apply the "checklist for empathy" that is based in robust cognitive and real-world evidence, in order to ask focused questions to help understand a North Korean perspective.
 - Firstly, we use the "checklist for empathy" to examine all Kim Jong-un's public speeches.
 - > Second, further examine how the DPRK regime responds to self-interest.
 - Third, we drill down into fear of threats to the regime—and indeed of death that are a key driver. We apply the modern neuroscience of fear in decisionmaking to help anticipate how different threats may affect the regime.
 - Next, we examine the use of unexpectedness and surprise, which has been a core component of DPRK military-diplomatic campaigns for 50 years.

INSIGHTS INTO KIM JONG-UN'S COGNITION FROM HIS PUBLIC SPEECHES

- 2.2. We first sought to examine Kim Jong-un's perspective by analyzing 41 public speeches and missives by him from Jan 2012 to Jan 2018. We used the "checklist for empathy" to derive themes that we tested for in the speeches, which were broken down into coded segments of text (9178 coded segments in total).⁴⁵ The following points represent the key findings and related recommendations.
- 2.3. Kim Jong-un's discourse particularly emphasize: (a) DPRK capability/opportunity; (b) self-interest; and (c) national identity.
- 2.4. KJU is steadily decreasing his emphasis on identity, whilst exhibiting an accelerating emphasis on status (all changes statistically significant below a p=.05 level). Juch'e

⁴⁵ This work was conducted in April-June 2018 with Larry Kuznar of NSI, who implemented the methods. Larry also helped interpret these findings in light of his own and others' additional analyses.

political philosophy is a key rhetorical framework, but Kim Jong-un is emphasizing it and his father and grandfather less.

- 2.5. Nuclear capability is seen as a necessary deterrent against US dominance and a point of national pride.
- 2.6. What does KJU not talk about?
 - China is responsible for some 90% of imports/exports to the DPRK and is ostensibly DPRK's closest ally. However, since 2012, Kim Jong-un has only publicly mentioned China twice, and both times in relation to historic Second World War opposition to the Japanese.
 - Foreign trade (with anyone) is only alluded to four times. Despite the DPRK's dependency on China and our perception that DPRK is badly in need of foreign trade, they are not mentioned in this regard.
 - According to Juch'e philosophy, the DPRK should have the character of an autarky (state with no dependencies on any other). Even if DPRK is dependent on others and in need of trade, Kim Jong-un cannot express this within the overarching Juch'e framework.
- 2.7. Implications:
 - Focus on providing/withholding things Kim can see as enhancing DPRK capability/opportunity and self-interest (military and aid).
 - It would be extremely difficult if not a non-starter, for Kim Jong-un openly to accept offers of open trade or dependency on other nations; any such offers must be done out of public discourse.
 - > Foreign trade may appear to be politically problematic for the regime.
 - > China may not have the influence over Kim Jong-un we assume.

SELF-INTEREST, OPPORTUNITY AND CAPABILITY

- 2.8. Self-interest is a key DPRK motivation. This may refer to self-interest of the DPRK as a whole, as well as the self-interest of key individuals or groups. In negotiations, the U.S. may consider offering things that cannot easily be reversed, so they rely less on DPRK trust in the U.S. At the state level, for instance, one might offer to build large expensive facilities in the DPRK that benefit the DPRK (e.g. factories, railways). These will also act to modernize DPRK society and thus over the long-term destabilize DPRK regime control.
- 2.9. Self-interest of key individuals may also be targeted effectively. The 2017 seizure of DPRK funds from Macao's Banco Delta Asia had a large impact.⁴⁶ Operating on self-interest at the elite level may have outsized effects, particularly with Kim Jong-un's seemingly expensive tastes.
- 2.10. Rewards are also a part of the DPRK strategy regarding its own population and it is notable that the regime paints a positive path forward and does not only operate through fear (although that is a large component under the brutal regime). In 2011, for instance, DPRK media published a worldwide rating⁴⁷ of happiness in which the

⁴⁶ Andrei Lankov, *The Real North Korea: Life and Politics in the Failed Stalinist Utopia*, 1st ed. edition (Oxford: OUP USA, 2013).

⁴⁷ Lankov. Ch. 2

happiest people lived in China with the DPRK coming in second. The U.S. and ROK took the two lowest places in this rating.

- 2.11. More broadly, at the state level Cold War strategist Tom Schelling made the important point that threats should be coupled with potential rewards (or at least absence of punishments) if the target complies.⁴⁸ One does not perhaps have to go as far as the ROK "Sunshine policy", first announced in 1998 and that explicitly coupled economic rewards for cooperation with threatened punishments for provocations but potential rewards for cooperative behavior have, as during that period, had some impacts on the DPRK.
- 2.12. A related key DPRK motivation is the opportunity for long-term regime continuance, achieved via playing off great powers and receiving aid. The regime requires a plausible path forward and this likely involves aid rather than trade as a source of income. Effectively, aid rather than real trade has been the main source of DPRK funds from abroad since its inception.⁴⁹ Unfortunately, Final, Fully Verified Denuclearization (FFVD) would reduce DPRK ability to get that aid.

FEAR

- 2.13. A key DPRK motivation is fear of personal death for Kim Jong-un, the Kim family and key regime members (e.g. the Organization and Guidance Department; OGD). There is a long history of assassinations and attempted assassinations of senior DPRK and ROK officials. Here, such death may occur in three main ways:
 - (a) "<u>G</u>addafi" The DPRK loses the ability to deter outside intervention in medium term;
 - (b) "<u>G</u>lasnost"⁵⁰ Regime softening leads to collapse in medium term;
 - (c) "Ignorable" without nuclear weapons, the DPRK loses ability to obtain aid and collapses in the medium term
- 2.14. These three causes of fear mean the DPRK will be unlikely to undertake FFVD. However, they also suggest points to consider during negotiations. In all three cases, a crucial issue is how far the DPRK **trusts** that the ROK/US will ensure key peoples' **personal safety** before nuclear weapons are surrendered and/or reforms undertaken. DPRK trust in US/ROK assurances is very difficult to achieve—not least because new administrations in such democratic states can reverse predecessors policies—but one should, as far as possible, build trust with the DPRK using evidence-based methods such as trusted messengers.⁵¹
- 2.15. The U.S. can also stress to the DPRK that continued nuclear weapons programmes will mean ROK and Japan will develop and deploy increasingly sophisticated rapid targeting for the "kill chain" and this is dual use for decapitation. This moves the region to a situation where ever more countries will have finger on a trigger that could lead to the leadership's personal death.
- 2.16. However, "fear" doesn't just work in one way, and modern neuroscience has a lot to say about the different ways that "fear" operates. Next, I show how the brain's

⁴⁸ Schelling, *Arms and Influence*.

⁴⁹ Lankov, The Real North Korea.Ch. 4

⁵⁰ Kim Jong-un may or may not himself fear "Glasnost". There can be inter-generational and inter-individual differences. For instance, Soviet premier Gorbachev differed from his predecessors, and Kaiser Wilhelm II who led Germany into World War I differed from his liberal father who died shortly after taking the throne. ⁵¹ Wright, "From Control to Influence."

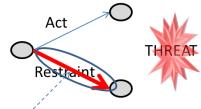
Pavlovian system shapes human responses to threat – and this forecasts why some types of coercive threats are more effective than others, and when instead of deterring an adversary threats provoke defensive attack.

Pavlovian system: shaping responses to threat

2.17. The "Pavlovian" system in the brain comprises ancient, low-level brain structures such as the amygdala and ventral striatum⁵², which are highly conserved across humans and other animals. This system identifies stimuli that predict significant events (e.g. a threat of punishment) and triggers pre-specified reactions that shape our response.

Pavlovian responses to threat and why deterrence is easier than compellence

2.18. Aversive stimuli such as the threat of punishment trigger powerful Pavlovian reactions. In particular they bias individuals not to act (although below I discuss a particular context where instead they trigger attack). To illustrate, consider the poor television gameshow contestants who must overcome such inhibition of action in order to touch a (harmless) tarantula or bucket of insects.⁵³ More abstract stimuli representing electric shocks or losing money similarly inhibit action.⁵⁴ Threats are more likely to make decision makers not act.



Pavlovian effect of threat strengthens deterrence

Figure. 2.1 Pavlovian effects: why deterrence is easier than compellence. In the DO JOC framework

- 2.19. One can consider this from the point of view of the adversary: they are presented with an aversive stimulus (a threat of punishment) and have to make a decision. An aversive stimulus (a threat) triggers the Pavlovian response to inhibit action and this is exactly the behavior requested by a deterrent, but not a compellent, threat.
- 2.20. This predicts adversaries will respond differently to the two main types of threats in the deterrence literature: deterrent threats (i.e. issuing a threat to demand that an adversary inhibits an action); and compellent threats (i.e. issuing a threat to demand that an adversary makes an action).⁵⁵ This is important. For example, consider potential US actions to stop suspected Iranian nuclear weapons development which involves uranium enrichment. Should one focus on deterring them from possibly making nuclear weapons, or on compelling them to stop enriching uranium?
- 2.21. We must also consider possible alternative explanations. Despite various intuitive explanations⁵⁶ the idea that deterrence is easier than compellence has proven

⁵² P Dayan, "The Role of Value Systems in Decision Making," *Better than Conscious*, 2008, 51–70.

⁵³ For example the currently popular UK television show "I am a celebrity get me out of here".

⁵⁴ Nicholas D Wright et al., "Approach–Avoidance Processes Contribute to Dissociable Impacts of Risk and Loss

on Choice," *The Journal of Neuroscience* 32, no. 20 (May 16, 2012): 7009–20. ⁵⁵ Schelling, *Arms and Influence*.

⁵⁶ Schelling (*Arms and Influence*, p70) suggested compellent threats often require punishment be administered until the other acts, rather than only if he acts as in deterrence, thus imposing greater cost. Posen argues that

difficult to test with historical data.⁵⁷ Independent neuroscientific evidence helps support and explain this idea. This neuroscience-based explanation is also simpler than previous behavioral psychology accounts, which have been based on Prospect Theory.⁵⁸ These behavioral accounts suggest that, relative to a moving reference point against which potential outcomes are coded as gains or losses, deterrent demands ask an adversary to forgo a potential gain but compellent demands ask them to accept a potential loss. Decisions then differ as for gains and losses Prospect Theory prescribes different weighting ("loss aversion", where losses matter more than gains) and different risk attitudes (the "reflection effect", e.g. more gambling with losses).⁵⁹ A neuroscience-based explanation, avoids problems of determining "reference points" well-known to bedevil such efforts.⁶⁰ Note also that a neuroscience-based account explains the experimental findings on which Prospect Theory itself is based, such as "framing".⁶¹

2.22. **DPRK relevance:** The relates to the idea that equivalent threats are more likely to deter than compel. Deterrence might describe, for example, strategies to prevent North Korea from initiating, or escalating, hostilities. However, when the U.S. aims to convince Kim Jong-un to denuclearize, such proliferation reversal strategies are "compellence." Thus, the U.S. has *deterred* the DPRK from escalating hostilities on the Korean Peninsula, but failed to *compel* it to abandon its nuclear weapons and ICBM programs – and the tendency will be for this harder task to continue to be rebuffed.

When threats provoke defensive attacks: distance and escape

2.23. However, our knowledge of Pavlovian effects also tells us that, while in general threats triggers avoidance as described above, an identical threat, when close and with little possibility of escape, instead provokes defensive attack.⁶² This suggests that threats targeting leaders directly may lead to qualitatively different, more aggressive responses. Such a discontinuity in response to threat may explain otherwise seemingly unpredictable behavior.

failing to resist a deterrent threat risks future predation by others (Barry R. Posen, "Military Responses to Refugee Disasters," *International Security* 21, no. 1 (July 1, 1996): 72–111.). Art writes that acceding to compellent threats is more public, and that "compellence more directly engages the passions of the target ... because of the pain and humiliation inflicted upon it" Robert J. Art, "Coercive Diplomacy: What Do We Know?," in *The United States and Coercive Diplomacy*, ed. Robert J Art and Patrick M Cronin (Washington, D.C.: United States Institute of Peace Press, 2003).

 ⁵⁷ Eric Herring, *Danger and Opportunity: Explaining International Crisis Outcomes* (Manchester Univ Pr, 1995).
 ⁵⁸ Gary Schaub, "Deterrence, Compellence, and Prospect Theory," *Political Psychology* 25, no. 3 (June 1, 2004): 389–411.

⁵⁹ Note that is the simpler version of Prospect Theory (1979), while Cumulative Prospect Theory is more complicated still.

⁶⁰ Robert Jervis, "Political Implications of Loss Aversion," *Political Psychology* 13, no. 2 (June 1992): 187–204.

⁶¹ Wright et al., "Approach–Avoidance Processes Contribute to Dissociable Impacts of Risk and Loss on Choice." ⁶² D. C Blanchard and R. J Blanchard, "Ethoexperimental Approaches to the Biology of Emotion," *Annual Review of Psychology* 39, no. 1 (1988): 43–68.

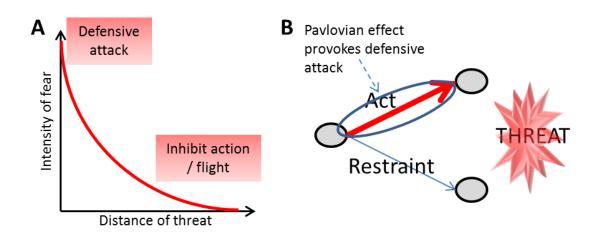


Figure 2.2: Pavlovian effects. When threats provoke defensive attacks. Panel A shows how an identical attack can cause avoidance or defensive attack depeding on defensive distance. Panel B places defensive attack in the framework of the DO JOC.

2.24. Russian President Vladimir Putin describes this beautifully in his quasi-autobiography. Growing up in a dilapidated Leningrad apartment building, Mr. Putin used to chase rats with sticks. "Once I spotted a huge rat and pursued it down the hall until I drove it into a corner," he recounted. "It had nowhere to run. Suddenly it lashed around and threw itself at me. I was surprised and frightened. Now the rat was chasing me."⁶³



2.25. This critical contextual variable—the "defensive distance", which **PUTIN** is low when the threat is close there is little possibility of escape—has been studied extensively in animals. In humans, subjective reports concur with such effects.⁶⁴ Scanning the human brain circuits that respond to threat also shows that depending on distance, different parts of these circuits mediate responses to threat – and this happens even in more abstract situations, for example in computerized simulations where "predators" that can inflict real electric shocks chase individuals through a maze.⁶⁵ Such context effects also explain changes in economic decisions that involve the threat of monetary losses.⁶⁶

2.26. A historical example is the Sino-Soviet border confrontation of 1969.⁶⁷ Over an eight month period there were multiple non-trivial conventional military exchanges with fatalities on both sides. There was also a Soviet nuclear build-up in regions bordering China and public messages (via the US and others) of a potential Soviet nuclear

⁶³ Vladimir Putin et al., *First Person: An Astonishingly Frank Self-Portrait by Russia's President*, 1 edition (New York: PublicAffairs, 2000).

⁶⁴ Pages 994-5 in D. Caroline Blanchard et al., "Risk Assessment as an Evolved Threat Detection and Analysis Process," *Neuroscience & Biobehavioral Reviews* 35, no. 4 (2011): 991–998.

⁶⁵ Dean Mobbs et al., "When Fear Is near: Threat Imminence Elicits Prefrontal-Periaqueductal Gray Shifts in Humans," *Science (New York, N.Y.)* 317, no. 5841 (August 24, 2007): 1079–83.

 ⁶⁶ Wright et al., "Approach–Avoidance Processes Contribute to Dissociable Impacts of Risk and Loss on Choice."
 ⁶⁷ Michael S Gerson, *The Sino-Soviet Border Conflict* (CNA, 2010). Pages 46-52

attack. However, what spurred the Chinese to put nuclear weapons on combat alert for the only time so far (that is known), was the fear of a sneak decapitation strike against the leaders themselves in Beijing (perhaps not unreasonably in light of Soviet tactics the year before in Czechoslovakia).

2.27. A second historical example relates to the Cuban leader Fidel Castro. It is notable that he was under continual threat of personal assassination when, during the Cuban missile crisis of 1962, he argued for a Soviet nuclear strike on the US.⁶⁸ That was an extremely aggressive strategy, given that any US nuclear retaliation involving Cuba would likely be annihilatory for a country of that size.

Policy Recommendations: Threats of punishment trigger powerful Pavlovian reactions			
In general, threats bias individuals to inaction or flight (e.g. deterrence) relative to action (e.g. compellence).	(1) Compellence will require larger threats (i.e. to make the adversary stop acting) than equivalent deterrence (i.e. to inhibit the adversary from acting).		
But an identical threat, when close and with little possibility of escape, instead provokes defensive attack	 (1) If one <u>deliberately</u> chooses to threaten leaders: (a) Anticipate this may provoke defensive attack (i.e. blowback or "irrationally" aggressive adversary response) (b) Understand that targeting leaders of near-peer nuclear⁶⁹ or conventional powers is likely inherently destabilizing (2) Avoid <u>inadvertently</u> threatening leaders or a regime (a) If leaders perceive themselves to be cornered (e.g. as in Vladimir Putin's story of the rat above), then increasing the amount of threat may have the opposite effect to that intended – i.e. increased threat won't deter the adversary more, but make them <i>more</i> likely to attack. (b) Identify perceived survival threats to adversaries to forecast otherwise unexpectedly aggressive response. E.g. DPRK regime security is a prime objective, so threatening this may provoke an otherwise unexpectedly aggressive response. 		

Table 2.1: Policy recommendations from Pavlovian reactions to threat.

2.28. We must also consider possible alternative explanations. Perhaps the most important is the idea that when targeted for regime change, enemy leaders have little incentive to restrain their resistance. Whilst this likely contributes to behavior, this does not

⁶⁸ Allison and Zelikow, *Essence of Decision*.. Pages 330, 333, 361.

⁶⁹ For example, this would argue against the July 1980 US Presidential Directive that aimed to strengthen deterrence, which included finding Soviet leaders in their bunkers, and influential voices outside government calling for removing Soviet leaders. See pages 375-7 in Lawrence Freedman, *The Evolution of Nuclear Strategy*, 3rd edition (Palgrave Macmillan, 2003).

make a clear positive prediction as to what behavior to expect, such as a qualitatively different, more aggressive response.

- 2.29. **DPRK relevance:** Directly threatening the leaders, especially where there is no escape, may provoke a qualitatively different and more aggressive response (i.e. an otherwise seemingly unpredictable discontinuity in responses of the adversary). Any Korean peninsula escalation scenario carries the danger of a provocative ROK action causing escalation desired by neither the US nor other powers like China. In such a confrontation one must be aware that targeting leaders deliberately or inadvertently (e.g. by missile strikes) may lead to a defensive attack. As the ancient strategist Sun Tsu wrote: "To a surrounded enemy, you must leave a way of escape." More broadly, directly attacking leaders may be desired, for example due an ascribed moral culpability, but one should be aware of potential consequences.
- 2.30. Indeed, such ROK capabilities are being developed. In 2013, South Korea and the United States began to implement a comprehensive 4D (detect, defend, disrupt, and destroy) strategy to counter North Korean missiles.⁷⁰ Seoul has begun constructing an improved missile defense platform, the Korea Air and Missile Defense (KAMD) system. The offensive elements utilize a growing arsenal of precision strike capabilities to disrupt or preempt a North Korean missile attack (termed the Kill Chain system), to decapitate the North Korean leadership, or to destroy other high-value targets (termed the Korea Massive Punishment and Retaliation, or KMPR, strategy).
- 2.31. As has been noted⁷¹, "if North Korean leaders fear for their survival, they might risk using nuclear weapons first". As a recent RAND study "under these circumstances, the weaker side has, in a sense, achieved escalation dominance. . . . Pyongyang can credibly threaten to use nuclear weapons against a range of assets valued by its adversaries because decision makers in Washington and Seoul know that Kim and company may perceive that they will be no worse off than they already are should the United States retaliate in kind."⁷²

EXPECTATIONS, SURPRISE AND PREDICTION ERROR – A KEY NORTH KOREAN TOOL

- 2.32. A core insight from neuroscience is that when we make an action, the impact it has on the other's decision-making is crucially modulated by the action's associated "prediction error".⁷³ This prediction error is simply defined as the difference between what actually occurred, and what the other expected. The bigger the associated prediction error, the bigger the psychological impact of the action.
- 2.33. A simple prediction error framework helps forecast an event's impact on an audience. One asks *"how unexpected was the event from that audience's perspective?"*

⁷⁰ Toby Dalton, Narushige Michishita, and Tong Zhao, Security Spillover: Regional Implications of Evolving Deterrence on the Korean Peninsula (Carnegie Endowment for International Peace, 2018). p. 17
⁷¹ Dalton, Michishita, and Zhao. p. 16

⁷² David Ochmanek and Lowell H. Schwartz, *The Challenge of Nuclear-Armed Regional Adversaries* (Santa Monica, CA: RAND Corporation, 2008)

⁷³ From simple tasks Yael Niv and Geoffrey Schoenbaum, "Dialogues on Prediction Errors," *Trends in Cognitive Sciences* 12, no. 7 (July 1, 2008): 265–72, https://doi.org/10.1016/j.tics.2008.03.006., to more complex social interactions Timothy E J Behrens, Laurence T Hunt, and Matthew F S Rushworth, "The Computation of Social Behavior," *Science (New York, N.Y.)* 324, no. 5931 (May 29, 2009): 1160–64,

https://doi.org/10.1126/science.1169694., it is central to how humans understand, learn and decide about the world.

2.34. An important instance is shown in Fig. 2.3, where an event can either occur or not occur, and can either be expected or not expected. Strategic bombing illustrates different combinations of these effects. First, an event occurs and was not expected, so has a large associated prediction error. For example, First World War German air raids on London were small-scale, but being so unexpected had a large psychological impact and caused panic. Second, extrapolating from this, influential inter-war airpower theorists suggested powerful and recurrent bombing would psychologically paralyze an adversary causing rapid collapse. However, such

	Event not expected	Event expected
Event occurs	a) Associated with prediction error	b) No prediction error
Event not occur	(trivial case)	c) Associated with prediction error

Figure 2.3: Illustrating prediction errors (prediction error = actual event – expected event)

recurrent bombing is well expected. For example, in the "Blitz" on London, recurrent bombing exerted far greater destructive power but had far less psychological impact than forecast. Third, an event is expected but doesn't occur, so this absence itself leads to large prediction error. For example, in the Vietnam War, U.S. campaigns bombed regularly and used pauses as a conciliatory signal.

- 2.35. The nature of events can also be more or less unexpected, so that the prediction error associated with the event can increase or decrease its impact. Examples include domain-specific effects and cross-domain effects, as well as effects related to geography, novelty and first times.
- 2.36. Ambiguity and salami-slicing are key methods for reducing the impact of individual actions and so gradually changing decision-making or norms over time without providing perceived grounds for significant responses in the eyes of key U.S. allies, domestic and other audiences. U.S. responses to such tactics here may include enhancing the prediction error associated with such activities, for example by releasing large amounts of information intermittently to enhance its impact and by making the nature of the information released novel.

Examples of DPRK conventional provocations involving surprise

2.37. Prediction error has been an important tool for the DPRK. As one prominent study of the DPRK military-diplomatic campaigns noted "an element of surprise has almost always been an important ingredient in North Korea's military actions." … "The frequent use of surprise seems to have implanted in our minds an impression that the North Koreans are "crazy." However, surprise has actually worked well."⁷⁴ I note a number of examples below.

⁷⁴ Narushige Michishita, *North Korea's Military-Diplomatic Campaigns, 1966-2008* (Abingdon; New York: Routledge, 2011). pp. 2-3

- 2.38. *January 21, 1968 Blue House Raid* A North Korean armed guerrilla unit attempted to infiltrate the Blue House to assassinate South Korean President Park Chung-hee, which was foiled with over 160 ROK police/military casualties.
- 2.39. *January 23, 1968 USS Pueblo Seizure* Two days later, the U.S. navy intelligence ship Pueblo on its mission near the coast of North Korea was captured in international waters by North Korea and the crew held prisoners for 11 months.
 - These unexpected events had a reasonably large impact on U.S. President Johnson, with the U.S. immediately dispatching an aircraft carrier.
- 2.40. *April 15, 1969 EC-121 Incident* North Korea destroyed an unarmed U.S. EC-121 reconnaissance plane over the East Sea with 31 American casualties.
 - U.S. officials were less surprised and argued for a restrained response. However, this was surprising to the new President Richard Nixon who in keeping with this large impact verbally rebuked the attack and wanted a strong response. One U.S. aircraft carrier and two destroyers were sent from Hong Kong to waters off Korea. The surprise was specifically stressed by both President Nixon and the novelty by U.S. intelligence reports.⁷⁵
- 2.41. *August 18, 1976 Axe Murders* Whilst trimming the branches of a poplar tree in the neutral area, two U.S. army officers were killed by North Korean soldiers flamboyantly using axe handles.
 - The unexpected nature of the murders led to a larger U.S. response than anticipated by the DPRK⁷⁶, with an unarmed U.S. force cutting down the tree but backed by a large military presence.

Managing prediction errors as a policy tool

- 2.42. Managing the prediction error associated with actions can be an important tool more broadly. Kim Jong-un's recent actions illustrate this. Kim Jong-un's novel presentation of his actions during recent North-South meetings had a very positive effect on polls of South Korean trust in the DPRK, despite the lack of substance.⁷⁷ Indeed, he amplified the feeling of a potentially new approach under his rule early on by making the unprecedented admission that a DPRK rocket test had failed⁷⁸ such Juch'e rocket science was never previously admitted as fallible. The nature of his wife's public role was also an unprecedented break from the past.
- 2.43. Another example of how different management of prediction errors can lead to significantly different policy outcomes is the shown by comparing the DPRK reaction to the Soviet and Chinese granting diplomatic relations with the ROK:

⁷⁵ Van Jackson, *Rival Reputations: Coercion and Credibility in US-North Korea Relations* (Cambridge: Cambridge University Press, 2016).

⁷⁶ Jackson.

⁷⁷ Robin Wright, "Kim Jong Un Was Funny, Charming, and Confident but Brought His Own Toilet," *The New Yorker*, May 3, 2018, https://www.newyorker.com/news/news-desk/north-koreas-leader-was-funny-charming-and-confident-but-brought-his-own-toilet.

⁷⁸ Lankov, The Real North Korea. Ch. 3

- (a) The Soviets acted rapidly under Gorbachev, and this more surprising action had a larger impact on the DPRK.⁷⁹
- (b) In contrast, China (i) salami-sliced diplomatic relations with Seoul, for example setting up trade offices that were "an important step but not a dramatic one"; and (ii) issued warnings to the DPRK that prepared the ground carefully.⁸⁰ The Chinese actions were perceived much less unfavourably.

⁷⁹ Don Oberdorfer and Robert Carlin, *The Two Koreas: A Contemporary History*, Revised Edition edition (New York: Basic Books, 2013). pp. 161, 162, 170, 171

⁸⁰ Oberdorfer and Carlin. p.192

- 3.1. This chapter examines evidence for cultural differences in decision-making.
 - First, I systematically examine large numbers of psychology experiments that compare how East Asian and Western individuals respond to key aspects of decision-making such as risk, losses or fairness. These do *not* consistently differ between East Asian and Western individuals, making us more confident applying findings related to such cognitive dimensions across cultures.
 - Secondly, I show there are robust differences in context-dependence between East Asian and Western individuals. These help explain differences between Chinese and U.S. strategic thinking on deterrence, offense and defense (e.g. shown by comparing U.S. and Chinese doctrine).
 - Third, I note that unlike for China, both North and South Korean strategic culture is much less studied. Thus, whilst the concordance of Chinese doctrine with a context dependent-independent framework provides circumstantial evidence that it might apply to North Korea, we do not yet possess robust direct evidence for North Korea.

HUMAN COMMONALITIES: EAST ASIAN AND WESTERN RESPONSES TO REWARDS AND PUNISHMENTS

- 3.2. What do we know about the commonalities and differences in how East Asian and Western *individuals* decide between options based on potential rewards and punishments? This is central to cross-cultural comparisons between these regions in policy challenges like behaviour change. Considerable Western behavioural, economic and neuroscience work has focussed on key experimental tasks, for example decision-making under risk or in the "Ultimatum Game" that assesses responses to fairness.
- 3.3. To understand if there were robust differences in decision-making between cultures, we systematically reviewed experiments that directly compare them in both East Asian and the Western populations.⁸¹ Our 27 searches (nine aspects of choice in three databases) yielded 1865 records. We included 35 studies.
- 3.4. For non-social choice I examined four areas:
 - Risk-taking did not consistently differ between cultures;
 - Intertemporal choice (how much one discounts potential future rewards or punishments) did not consistently differ between cultures;
 - Whether outcomes reflect gains or losses (e.g. as described in Prospect Theory) did not consistently differ between cultures;

⁸¹ Nicholas D Wright and Yimeng Kong, "First Things First: A Systematic Review of Economic Choice in Lab Experiments between East Asia and the West," In prep.

- Regret between cultures had not been studied, although in the first such study my own work showed no difference between Chinese and Western individuals.⁸²
- 3.5. We also examined five social tasks⁸³:
 - the Ultimatum Game tests fairness and did not consistently differ between cultures;
 - Prisoners' Dilemma and Public Goods Games test cooperation and neither consistently differ between cultures.
 - In the Trust Game we found consistent evidence for no cultural difference in investor's decisions, but also that East Asian trustees repay more than Westerners.
- 3.6. In summary, we found surprisingly inconsistent basic findings in canonical tasks, other than one aspect of the Trust Game. Thus, there is no robust and consistent evidence yet for differences in cross-cultural differences in key areas of choice such as risk, fairness or response to punishments.

CULTURE: MORE CONTEXT-DEPENDENT EAST ASIAN THAN WESTERN VIEWS

3.7. However, a finding of greater context-dependence in the cognition of East Asian than Western individuals is reasonably well supported by multiple studies. Greater Chinese context-dependence in strategic thinking (e.g. on deterrence, defense and offense) reflects these robust differences identified in cross-cultural cognitive science. Less is known directly of Korean strategic thinking.

Cognitive foundations for East Asians versus Westerners

- 3.8. Westerners tend to engage in more <u>context-independent</u> cognitive processes by focusing on a salient object independently of its context, whereas East Asians tend to engage in more <u>context-dependent</u> or holistic cognitive processes by attending to the relationship between the object and the context in which it is located.⁸⁴ This is also referred to as holistic versus analytic or field-dependent versus field-independent cognition. Context is the setting or background of events or objects within which the focal object is located.
- 3.9. Greater East Asian context-dependence is seen across diverse cognitive domains, such as perception, attention, memory and action.⁸⁵ For instance, in a perceptual task participants view a rod in the context of a surrounding frame and must judge when the rod is vertical when the frame is tilted, that context more greatly influences Chinese than Western perceptions. Another example tested memory for videos, with East Asians more likely to remember contextual background and the relationships between objects, and furthermore later on East Asians' (but not

⁸² Li Li et al., Parsing cultural impacts of risk and regret, *Scientific Reports* (forthcoming)

⁸³ The fifth task, the Dictator Game, had not been studied.

⁸⁴ Richard E. Nisbett and Yuri Miyamoto, "The Influence of Culture: Holistic versus Analytic Perception," *Trends in Cognitive Sciences* 9, no. 10 (2005): 467–473.

⁸⁵ Richard Nisbett, *The Geography of Thought: How Asians and Westerners Think Differently...and Why*, 1St Edition edition (New York: Free Press, 2003).

Americans') accuracy at recalling objects was affected by providing context. Other work showed related effects in, for instance, cross-cultural differences in newspaper coverage of crime.⁸⁶

Chinese strategic thinking on offense, defense and deterrence

- 3.10. This empirical finding from cross-cultural psychology cognition provides specific hypotheses for differences in U.S. and Chinese thinking on a key dimension of doctrine⁸⁷: namely deterrence, defense and offense. Broadly, in Chinese accounts, perceptions of events and actions will be more dependent on their deterrent, defensive or offensive context, and such categories will themselves be understood more holistically together.
- 3.11. Implication 1. Chinese accounts of deterrence are more context-dependent, whereby events and actions are viewed more within the context of surrounding events and actions than in U.S. accounts. This provides a new perspective for how strategic culture may affect deterrence. It parsimoniously explains cultural differences across three core features of deterrence.
- 3.12. Firstly, it sheds new light on the potential for different Chinese and U.S. perceptions about the intention and meaning of first strikes or preemptive actions. In more context-dependent Chinese accounts, even preemptive actions may be perceived as part of deterrence against an adversary when seen in the context of deterrence operations against that adversary. This may cause significant misperception: a preemptive act understood from within a context-dependent perspective as being heavily influenced by its context to comprise part of a deterrent strategy, would instead be perceived very differently by a context-independent culture that views the act shorn of context.
- 3.13. Secondly, while a more context-independent U.S. view of coersive episodes renders a meaningful distinction⁸⁸ between deterrence (that aims to dissuade an adversary from acting) and compellence (that aims to coerce them to act), in contrast a more context-dependent Chinese view would find little meaningful distinction. In the context of repeated interactions, what constitutes a status quo from which to judge each actor's actions as compellent or deterrent? For example in the 1950s the U.S. issued what they understood to be deterrent threats to the Chinese over Taiwan, but in the context of ongoing Chinese activities and claims towards unification these may be considered compellent.⁸⁹ This cultural difference may cause misperception. When making actions, the Chinese 'deterrent' toolkit will include the more 'compellent' tools (e.g. more forceful naval and paramilitary activities in the South China and East China seas, or blockade in a Taiwan contingency) that to U.S. deterrent threats framed in

⁸⁶ I systematically examined studies examining this aspect of cognition. Details available on request. Although outside the scope of this systematic review, four studies comparing newspaper coverage were found. See e.g. Ibid.

⁸⁷ Posen, The Sources of Military Doctrine.

⁸⁸ Thomas Crombie Schelling, Arms and Influence (Yale University Press, 1966).

⁸⁹ Richard Ned Lebow and Janice Gross Stein, "Deterrence: The Élusive Dependent Variable," *World Politics* 42, no. 3 (1990): 336–69. p. 354

U.S. terms as a deterrent action may instead be more readily perceived from within the broader Chinese concept as little different to more offensive compellent activities, particularly when coupled with worst case interpretations of others' actions.

- 3.14. Thirdly, a more context-dependent and holistic Chinese worldview also makes new predictions for cultural differences in the relationship between deterrence and warfighting. Whilst during the Cold War considerable thought was given to the relative balance of warfighting and deterrent components of Soviet policy⁹⁰, instead here the hypothesis from cross-cultural psychology is that Chinese accounts view deterrence and warfighting together more holistically than U.S. accounts. It is not just that planning or thinking about strategy in general may involve warfighting and deterrence, it is that in more holistic Chinese accounts they are more intimately connected and can be understood only by reference to the whole strategy of which they are both a part. Chinese accounts, which conceive of warfighting in the context of deterrence and deterrence in the context of warfighting, may be interpreted with alarm in the West as a predilection for warfighting as opposed to deterrence.
- 3.15. Implication 2. Chinese views of offense and defense are more context-dependent.
- 3.16. The concepts of offense (that aims to disarm an adversary) and defense (that aims to deny them their objective) are core military concepts. Previous work examined offensive doctrines and defensive doctrines, which revealed for example how the former may lead to war⁹¹, or how institutional or balance of power factors affect adoption of offensive or defensive doctrines.⁹² Instead, here the cross-cultural microfoundations suggest two new aspects to examine. Firstly, with respect to the degree that representations of offense and defense differ, more context-dependent Chinese accounts will view them as more intimately connected parts of a whole and understood only with reference to the whole. If offense and defense are in themselves less distinct, this is significant for Western debates about how far offensive and defensive capabilities may be distinguished.⁹³ Secondly, in more context-dependent Chinese accounts, perceptions of actions as offensive or defensive will be more strongly influenced by the context of offense or defense with that adversary in which they occur. If major Chinese operations, even extending to the 1962 action against Indian forces or 1979 incursion into Vietnam, may be rendered defensive by occurring within a context of defense, this may be perceived very differently by the U.S..
- 3.17. Such Chinese thinking on the concepts of offense and defense is illustrated by a key principle of Chinese doctrine: 'active defense', whose essence is the holistic integration of offense and defense.

Korean strategic thinking on offense, defense and deterrence

⁹⁰ Lawrence Freedman, *The Evolution of Nuclear Strategy*, 3rd edition (Palgrave Macmillan, 2003). pp. 254-7

⁹¹ Stephen Van Evera, "Offense, Defense, and the Causes of War," *International Security* 22, no. 4 (1998): 5–43. ⁹² Posen, The Sources of Military Doctrine.

⁹³ Michael E. Brown et al., Offense, Defense and War (Cambridge, Mass: MIT Press, 2004).

- 3.18. Unlike China, there has been much less study of strategic culture in both North and South Korea.⁹⁴ Indeed, studies of North Korea have focused on issues such as the the core ideology of self-reliance (*Juche*), which prioritizes national security over all other policy concerns, and how the cult of personality of concerning the Kims allows some continuity in expression of military orientations.
- 3.19. Thus, whilst the relevance of a context dependent-independent framework for understanding North Korea is suggested by its usefulness for explaining another East Asian strategic culture—China's—we do not possess robust direct evidence for North Korea.

RECOMMENDATIONS

- 3.20. Key aspects of decision-making such as responses to risk, losses or fairness are not shown to differ consistently between East Asian and Western individuals making us more confident to extrapolate about such commonalities between cultures.
- 3.21. Policymakers are often beseeched to put themselves in others' shoes, but practically doing this requires specific questions. Taken together, a context dependent-independent framework provides analysts with specific questions to help put themselves in the others' shoes, in order to anticipate effects of potential actions on others and to interpret actions. To militate against their cultural prisms, U.S. analysis can specifically ask *'what is the broader context of this action'*? This may be more relevant to anticipating Chinese than North Korean decision-making.

⁹⁴ For some exceptions see e.g. Scott Snyder, "Patterns of Negotiation in South Korean Cultural Context," Asian Survey 39, no. 3 (May-June 1999);Kang Choi, "Korea: A Tradition of Peace-the Danger of War," Booth and Trood, Strategic Cultures in the Asia-Pacific, 1999, 106. Jiyul Kim, "Strategic Culture of the Republic of Korea," Contemporary Security Policy 35, no. 2 (May 4, 2014): 270–89, https://doi.org/10.1080/13523260.2014.927675. Jeannie L. Johnson, Kerry M. Kartchner, and Jeffrey A. Larsen, Strategic Culture and Weapons of Mass Destruction: Culturally Based Insights Into Comparative National Security Policymaking, 2009 edition (New York: AIAA, 2009); Seo-Hyun Park, Sovereignty and Status in East Asian International Relations (Cambridge University Press, 2017). Jeannie L. Johnson, Kerry M. Kartchner, and Jeffrey A. Larsen, Strategic Culture and Weapons of Mass Destruction: Culturally Based Insights Into Comparative National Security Policymaking, 2009 edition (New York: AIAA, 2009).

Chapter 4: Regional powers: putting yourself in their shoes

- 4.1. This chapter uses the "checklist for empathy" to analyse the motivations of key regional actors—China, the ROK and Japan—and examines how these interact over the DPRK challenge. I discuss three areas:
 - An overview of interacting "Regional Actor Interests" and the absence of "winwin."
 - > South Korean and Japanese motivations, and U.S. extended influence.
 - Chinese motivations.

OVERVIEW: REGIONAL ACTOR INTERESTS AND THE ABSENCE OF "WIN-WIN"

4.2. The DPRK is not the top priority for the Government of any other major regional power. Indeed, the Korean peninsula is only one of four potential flashpoints that might lead to Sino-U.S. escalation to war (Fig. 4.1). Even for the ROK, domestic policy challenges matter more than the DPRK⁹⁵, and the rise of China is a major factor.

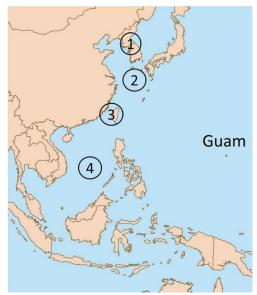


Figure 4.1: Four potential locations for Sino-U.S. escalation to war. From north to south these are: (1) Korean peninsula; (2) East China Sea; (3) Taiwan; and (4) South China Sea.

- 4.3. The region is moderately, but increasingly, unstable due to mismatched motivations and perceptions between key actors. Instability arises in large part from China's rise shifting power balances, and because of the global shift to an era of Grey Zone competition between great powers such as China, Russia and the U.S..
- 4.4. Against this background, the main DPRK-related threats to regional stability are the responses that DPRK actions provoke in Japan and the ROK and the responses in turn that these provoke in China and the DPRK. In particular, the ROK and Japan will likely develop and deploy more sophisticated rapid targeting for the DPRK "kill chain",

⁹⁵ Lankov, The Real North Korea.

but this is dual-use against China. China greatly disliked THAAD, and if the DPRK continues its nuclear development then China faces more such technology. This feeds, for example, into the Sino-Japanese security dilemma (spiralling fears of each other) and fairness dilemma (spiralling feelings each other side's actions are unjust).

- 4.5. Three examples of the interaction of factors between powers are:
 - (a) Managing unpredictability is a central challenge for U.S. policymakers: The DPRK has skillfully manipulated unexpectedness to maximise the impact of its diplomatic and military actions for over 50 years – U.S. policymakers must manage those effects on themselves, U.S. domestic audiences and allies. For allies such as the ROK or Japan, the U.S. must also manage the unexpectedness of its own actions, as unpredictability often breaks the trust on which rests U.S. credibility and extended deterrence.
 - (b) Fear drives much regional behavior and because the DPRK, ROK, U.S., Japan, China have fundamentally different and mismatched fears so that no single solution can address them. For instance, a key DPRK fear is personal death for the leadership; a key Japanese fear is China's rise; China's overriding fear is the U.S.; the U.S. fears DPRK ICBMs. Only coordinated action on all fronts can begin to address these fears.
 - (c) Fairness: Rejection of perceived injustice fuels Sino-Japanese and ROK-Japanese antagonism, as well as Japanese concerns over abductions – all destabilizing any regional peace process. Any deal must be perceived as fair or it likely won't stick.
- 4.6. Unfortunately, because of these mismatched perceptions and motivations there is no win-win scenario over the DPRK. Win-win is perceived. Moreover, It is not possible as we, sadly, move towards zero-sum U.S.-Chinese and U.S.-Russian thinking.

SOUTH KOREA, JAPAN AND EXTENDED INFLUENCE

4.7. U.S. alliances with Japan and the ROK have been central to U.S. influence in East Asia for over half a century. Indeed, Japan may have been the single most important U.S. Cold War ally.⁹⁶ Both relationships saw ups and downs. President Carter pledged to remove U.S. troops from the ROK, although was thwarted by his administration.⁹⁷ Trade disputes roiled the Japan-U.S. relationship for decades.⁹⁸ But both relationships have emerged strong and multilayered. The current U.S. administration's has been reappraising these relationships, but if the U.S. wishes to maintain its current regional influence these alliances are essential. This subsection considers South Korea, then Japan, and lastly the overarching U.S. challenge with both of extended influence.

⁹⁶ Odd Arne Westad, *The Cold War: A World History*, 1 edition (New York: Basic Books, 2017).

⁹⁷ Oberdorfer and Carlin, *The Two Koreas*.

⁹⁸ James L. Schoff, *Uncommon Alliance for the Common Good: The United States and Japan After the Cold War* (Washington, D.C.: Carnegie Endowment for International Peace, 2017),

https://carnegieendowment.org/2017/01/23/uncommon-alliance-for-common-good-united-states-and-japan-after-cold-war-pub-67742.

South Korea

- 4.8. North Korea is not the top political issue in South Korea.⁹⁹ As with almost every country in the world, domestic policy challenges are the main issues. Managing the DPRK is third key objective to deter attacks, manage escalation from provocations and eventually manage the huge reunification task. Being "a shrimp among whales" characterises the ROK's broader strategic challenge about which it fears U.S. abandonment and a rising China, whilst regulating complex relations with Japan.
- 4.9. *Self-interest:* (a) There is considerable anxiety about how a much poorer North Korea could be integrated with the South if reunification could occur.¹⁰⁰ German reunification cost a lot and the wealth disparity was much less. (b) China is an increasingly important market. Moreover, China punished the ROK economically over the recent THAAD deployment¹⁰¹, and such measures could be expected again as the Chinese economy continues to grow in importance regionally and globally whilst China becomes more assertive.
- 4.10. Fear: (a) Fears exist of the DPRK conventional threat to Seoul. (b) Fears also exist of DPRK Grey Zone actions, including military incidents like the 2010 provocations at Yeonpeyong Island and the sinking of the ROKS Cheonan. South Korea has also traded assassination threats with North Korea for decades. Indeed, recent President Park Geun-hye received numerous such threats, which may be more impactful given her mother and fathers' deaths during separate assassinations (see Chapter 6). (c) More longterm is the challenge posed by a rising China, with whom relations can be acrimonious as the recent THAAD episode illustrated. (d) The relationship with the U.S. is characterized by "abandonment-entrapment" tension, with fears of the U.S. doing too much or too little.
- 4.11. *Fairness:* A major obstacle to ROK-Japanese cooperation is the still present perception of Japan's unjust activities during the colonial and wartime eras.
- 4.12. *Status:* The ROK strongly desires full and equal consultation with the U.S. over North Korea negotiations.¹⁰²
- 4.13. *Identity*: South Korea has a strong strand of nationalism that values national autonomy.¹⁰³ This is far from peculiar to South Korea. A nationalist drive for autonomy, for instance, being central to Gaullism in France.
- 4.14. Expectations and their violations: (a) South Korea has been on the receiving end of DPRK provocations for decades in which surprise is a key component.¹⁰⁴ Kim Jong-un's novel presentation of his actions during recent North-South meetings have had a very positive effect on polls of South Korean trust in the DPRK, despite the lack of substance.¹⁰⁵ (b) President Trump's recent surprise to the South Korean leadership

⁹⁹ Lankov, *The Real North Korea*.

¹⁰⁰ Lankov.

¹⁰¹ Dalton, Michishita, and Zhao, *Security Spillover*.

¹⁰² SMA talk by John Nilsson-Wright, May 2018

¹⁰³ Kim, "Strategic Culture of the Republic of Korea." Park, Sovereignty and Status in East Asian International Relations.

¹⁰⁴ Michishita, North Korea's Military-Diplomatic Campaigns, 1966-2008.

¹⁰⁵ Wright, "Kim Jong Un Was Funny, Charming, and Confident but Brought His Own Toilet."

of cancelling joint exercises was met with a "curt" response by the South Korean Defense Ministry.¹⁰⁶

Japan

- 4.15. Seeks stability, openness and access in the Asia-Pacific as well as globally.¹⁰⁷ China's rise and the related potential threat from U.S. abandoning the U.S.-Japan alliance are the main fears. DPRK missiles are a real, but lesser, threat. Japan is moving away from some constraints from its pacifist constitution, in particular responding since 2010 to perceived Chinese Grey Zone threats.
- 4.16. Fear: (a) Japan's major security fear is the rise of China, with which Japan has considerable concerns over the Senkaku/Diaoyu islands in the East China Sea. (b) The U.S.-Japan alliance exhibits the "entrapment-abandonment" tension with the fear of U.S. abandonment. (c) Fear of DPRK conventional and unconventional missiles (chemical, biological, nuclear) is a real concern. These various fears are leading to increased Japanese defense spending and an increasing turn to precision strike-related capabilities that are in turn of concern to China.
- 4.17. *Fairness:* Japanese public perceptions of the unjust DPRK abductions of Japanese citizens in the 1970s and 1980s form a significant ongoing political issue. Indeed, Japanese Prime Minister Shinzo Abe has stressed this highly emotive issue publicly on numerous occasions. Japan's perceived unfair treatment of China in the nineteenth century "unequal treaties" and upto the Second World War remain a significant challenge for Sino-Japanese relations.¹⁰⁸
- 4.18. *Identity:* Japan's nationalist Prime Minister Shinzo Abe has sought relaxation of pacifist constraints, which remain strong both politically and constitutionally.
- 4.19. *Expectations and their violations*: President Trump's recent surprise to the Japanese leadership of cancelling joint exercises, only one week after a meeting with Japanese Prime Minister Abe, was met with significant concern.¹⁰⁹

Extended influence – deterrence, trust and confidence¹¹⁰

'it takes only five per cent credibility of American retaliation to deter the Russians, but ninety-five per cent credibility to reassure the Europeans."

- Denis Healey UK Defence Minister in the 1960s¹¹¹

¹¹⁰ This subsection draws on Wright, *Mindspace*, 2018.

¹⁰⁶ "Trump to Suspend Military Exercises on Korean Peninsula," *The New York Times*, June 11, 2018, sec. Asia Pacific, https://www.nytimes.com/2018/06/11/world/asia/trump-kim-live-updates.html.

¹⁰⁷ Schoff, Uncommon Alliance for the Common Good. p. 1

¹⁰⁸ Wright and Schoff, "China and Japan's Real Problem."

¹⁰⁹ "Experts Question Wisdom of Canceling U.S. Exercises with South Korea, As Mattis Makes It Official," *Foreign Policy* (blog), accessed September 4, 2018, https://foreignpolicy.com/2018/06/26/experts-question-wisdom-of-canceling-u-s-exercises-with-south-korea-as-mattis-makes-it-official/.

¹¹¹ Denis Healey, The time of my life (London: Michael Joseph, 1989), 243, quoted in David Yost, "Assurance and US Extended Deterrence in NATO," International Affairs, 85: 4 (2009), 768

- 4.20. U.S. success in any likely Korean peninsula escalation scenario critically depends on U.S. influence over key allied perceptions. An example of extended influence is extended deterrence. The central foundation of extended deterrence is that the ally *trusts* and has *confidence* in the U.S.. Trust is inherently psychological something one values is at risk, in a situation where what happens to it depends on somebody else's decision. Considerable work has examined trust's cognitive bases and how to enhance trust¹¹², which I apply in the following recommendations:
- 4.21. *Firstly, the concept of "extended influence" should be explicitly added to U.S. doctrine and planning.* Extended influence encompasses, for example, extended deterrence and escalation management including allies, as well as offence and defence involving allies.
- 4.22. Second, to build trust consider the bandwidth of trust-building: between elites, security apparatuses and populations (Fig. 4.2). Trust between elites is not enough when publics' distrust each other, as shown in the flowering of Anglo-German antagonism 1898-1906 before World War One.¹¹³

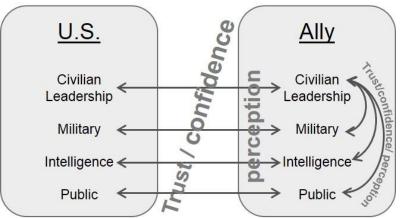


Figure 4.2: Bandwidth of trust between ally and U.S..Trust within the ally also matters.

- 4.23. *Third, manage predictability in U.S. actions to help manage trust and confidence.* Unpredictable behaviour tends to decrease confidence and trust.
- 4.24. *Recommendations:* Thus, help reduce prediction error (i.e. unexpectedness of one's actions; see Ch. 2) in the ally:
 - When the U.S. makes actions, warn allies beforehand, preferably in a meaningful way. Trust within countries will be critical, and hence warnings will not leave allied publics losing confidence in their own decision-makers.
 - Unpredictability may contribute to deterrence of the adversary, but will likely decrease confidence of allies. An example is current U.S.-Japan relations, where they are still very strong at many levels (e.g. military-military) but unpredictability at the very highest U.S. levels decreases trust.
- 4.25. Fourth, encourage change within the allies so that U.S. actions are less unexpected to them.
- 4.26. Recommendations:
 - Training and doctrine within key allies should enable them to understand U.S. operations.
 - U.S. exercises with the ROK or Japan, particularly involving high-level decision-makers, in themselves help build trust by reducing unexpectedness.

¹¹² Wright, "From Control to Influence."

¹¹³ Paul M. Kennedy, *The Rise of Anglo-German Antagonism 1860-1914* (Amherst, N.Y.: Prometheus Books, 1980).

- 4.27. Fifth, liking and similarity help increase trust.
- 4.28. Recommendation:
 - > U.S. soft power is important. U.S. public diplomacy is important.
- 4.29. Sixth, manage expectations because trust-building can backfire if it leads to overly optimistic expectations, which cause a backlash when they are violated.

CHINA

- 4.30. The most important trend in Chinese foreign policy is the move in the last five years under Xi Jinping away from Deng Xiaoping's dictum of China "biding its time" and towards a more assertive foreign policy. In the medium/long-term this aims to gain (re-gain in a Chinese narrative) China's regional pre-eminence. However, the main aim still remains to maintain the PRC regime, which involves continuing Chinese economic development to meet population expectations. That in turn requires avoiding both U.S. containment and inadvertent Sino-U.S. escalation to war.
- 4.31. On North Korea, the most striking differences reported for mainstream Chinese versus U.S. expert thinking are¹¹⁴: (a) the suspicion that the U.S. keeps DPRK tensions unresolved to justify its military presence on the peninsula in order to contain China; and (b) DPRK nuclear weapons are for strategic deterrence and are unlikely to embolden the DPRK to destabilise the region, so that U.S. calls for systems such as THAAD may be driven by hidden objectives. These differences contribute strongly to mismatched between China's fears and those of the U.S., ROK and Japan.
- 4.32. Self-interest: (a) The cost of refugees from a DPRK collapse is often cited as a reason for Chinese support of the DPRK regime, although this would likely be relatively negligible for a country China's size. In one historical precedent, during the 1995-97 famine in North Korea, an estimated 400,000 North Koreans crossed into China in search of food.¹¹⁵ However, given Korean peninsula relative ethnic homogeneity and likely ROK rebuilding of the DPRK after collapse, they will not likely cause the same long-term challenges as in other key historical examples of refugee flows e.g. during ongoing civil wars (e.g. Somalia that lacks of central government so individuals do not wish to return), with ethnic cleansing or genocide (e.g. African Great lakes surrounding the Rwandan genocide etc.) or with the redrawing of ethnic/national boundaries following (e.g. Indian partition). (b) Rare earth metals may be of economic value to China. (c) Potential for shipping through the DPRK may be of benefit to some Chinese provinces.
- 4.33. Fear. (a) Regime legitimacy is the Chinese leadership's top priority and collapse of the DPRK regime may present an unwelcome precedent for the Chinese regime. (b) However, much larger fears relate to potential U.S. containment or inadvertent escalation to Sino-U.S. war (e.g. over Taiwan). (c) There is also the perception of a potentially nationalist Japan. (d) There is also a fear that enhanced ROK and Japanese precision strike capabilities may be directed against China, or at least be dual use, and that they may even eventually threaten the Chinese nuclear deterrent.

¹¹⁴ Dalton, Michishita, and Zhao, Security Spillover. p. 29

¹¹⁵ Bruce W. Bennett and Jennifer Lind, "The Collapse of North Korea: Military Missions and Requirements," *International Security* 36, no. 2 (2011): 84–119.

4.34. *Fairness*: A strong Chinese narrative stresses the unfair treatment it received from Western powers and Japan in the nineteenth century "unequal treaties", for which China deserves restitution. However, this appears expansionist to countries such as Japan, and indeed Japan believes it is being treated unfairly by China. This clash of countries both believing they are right—a fairness dilemma—is a source of regional instability.¹¹⁶

RECOMMENDATIONS

- 4.35. The mismatched fears of regional powers drives much regional behavior and because the DPRK, ROK, U.S., Japan and China have fundamentally different and mismatched fears, no single solution can address them. Only coordinated action on multiple fronts can begin to address these fears.
- 4.36. Regarding Japan and the ROK:
 - The U.S. must pursue a multifaceted strategy to build trust and credibility. I make six recommendations. These include managing unpredictability, for instance by warning of actions if possible. Also build the bandwidth of trust and contact between the U.S. and each actor, by increasing contact in Mil-Mil, Intel-Intel, political and social channels.
 - Help mitigate Sino-Japanese fairness dilemma. This can employ a "one step back, three steps forward" strategy.¹¹⁷
- 4.37. Regarding China:
 - The U.S. must make clear that continued DPRK nuclear programmes that threaten the ROK and Japan will lead to more THAAD and conventional ROK and Japanese capabilities that threaten China – and that these are not aimed at China.

¹¹⁶ Wright and Schoff, "China and Japan's Real Problem."

¹¹⁷ Wright and Schoff. Discusses this in more detail, but is summarised here. Firstly, look with back apologies and self-reflection. A first step forward is anticipating factors that may exacerbate the fairness dilemma, e.g. help Japan and China develop less inflammatory forms of nationalism. Second, bring together discussions about differing contemporary governmental ideas of what is fair and just. Third, begin to develop a rules-based system for the East China Sea that reconciles competing concepts of fairness.

PART II NORTH KOREA AS A GREY ZONE CHALLENGE

Part II describes how the U.S. must understand what type of conflict it faces – a "Grey Zone" conflict. North Korea has conducted "Grey Zone" conflict for most of the past half century, literally neither fully at peace nor war. Grey Zone conflict also increasingly characterises regional competition between China, Japan and the ROK. This provides a powerful new lens to understand and manage this devilishly difficult DPRK confrontation and its regional ramifications. Managing Grey Zone conflict requires particular tools. It is necessarily *limited* conflict. Thus, the central aim is to *influence* the decision-making of adversaries and other key audiences, rather than removing their capacity to choose using brute force in itself. I apply evidence-based tools for influence in the Grey Zone (Wright 2017, Cognition in the Grey Zone), examined in the historical and current cases noted above. The U.S. retains a portfolio of unused Grey Zone actions it can threaten or apply to the DPRK, e.g. extensive information operations in the DPRK to decrease regime power. Understanding the Korean challenge as a Grey Zone conflict helps the U.S. anticipate and manage regional implications with allies (e.g. ROK and Japan) as well as competitors (China and Russia).

Chapter 5 describes the Grey Zone and how it provides a useful new lens for U.S. policymakers to craft effective strategies for the Korean peninsula and region. Chapter 6 discusses the DPRK and Grey Zone.

Chapter 5: Grey Zone conflict - a new way to see the challenge

- 5.1. Key points from this chapter include:
 - Grey Zone conflict is necessarily *limited* conflict, sitting between "normal" competition between states and what is traditionally thought of as war.
 - > The DPRK has been conducting Grey Zone conflict for over 50 years.
 - The region recently resumed Grey Zone competition, for example in the South and East China Seas, after a post-Cold War respite.
 - Considering the DPRK confrontation as a Grey Zone conflict provides a clear framework for understanding and managing a conflict that otherwise seems too dauntingly complex.
 - Technology changes, but the humans on the receiving end of influence remain human. The aim is to influence human psychology, so cognitive factors provide a solid bedrock for anticipating effects.
 - 'Five multiples' characterise Grey Zone conflict: multiple levels, timescales, domains, interpretations and audiences. The U.S. should develop the capabilities and policies to conduct Grey Zone conflicts, centred around operational requirements arising from the five multiples of the Grey Zone.

- 5.2. The DPRK has conducted Grey Zone conflict for half a century. It has been neither fully at peace nor war since the 1953 armistice. Since the mid-1960s it has regularly conducted high impact conventional military provocations and other activities but sought to *limit* their impact. Originally forming part of the Cold War that, as its name suggests, was itself a Grey Zone conflict, the Korean Peninsula's Grey Zone conflict continued after the Cold War ended. It seemed an unusual relic. No longer. The region, and the rest of the world, has now also entered a new epoch characterized more broadly by Grey Zone conflict between great powers such as China, Russia and the U.S..
- 5.3. Considering the DPRK challenge as a Grey Zone conflict provides a clear framework for understanding and managing a conflict that otherwise seems too dauntingly complex and sprawls across neat boundaries of peace, war, conventional, cyber, nuclear, economics, diplomacy, escalation and deterrence. Any strategy must include the spectrum of conflict from peace through to limited war, and coherently blend deterrence and escalation management. It must centrally involve multiple audiences (e.g. allies and third parties), multiple domains (e.g. conventional, cyber, diplomatic), multiple timeframes (e.g. not just each crisis, or recurrent crises, but also the longer game), multiple levels within societies (e.g. ROK and Japanese public opinion) as well as deal with the ambiguity of many DPRK actions that are open to multiple interpretations. The Grey Zone framework below naturally encompasses all these features needed for any successful U.S. strategy.

THE CENTRALITY OF INFLUENCE IN THE GREY ZONE

- 5.4. Grey Zone conflict is necessarily *limited* conflict, sitting between "normal" competition between states and what is traditionally thought of as war. Thus, the central aim is to *influence* the decision-making of adversaries and other key audiences, rather than removing their capacity to choose using brute force in itself. Success requires moving the emphasis from control to influence. Influence includes deterrence and escalation management. The DPRK has sought to keep the conflict limited by keeping actions below the threshold of war, both historically and now.¹¹⁸ Indeed, the DPRK has on a number of occasions described itself as in a state of "semi-war".¹¹⁹
- 5.5. What, if anything, differentiates the Grey Zone from other types of conflict? The fundamental nature of conflict is unchanged, but the Grey Zone requires different *emphases.* I summarise these key challenges as the *"Five Multiples"* of the Grey Zone (Box 5.1).

¹¹⁸ Michishita, *North Korea's Military-Diplomatic Campaigns, 1966-2008.* Dalton, Michishita, and Zhao, *Security Spillover.* p. 14.

¹¹⁹ Jackson, *Rival Reputations*.

TOTAL WAR

LIMITED WAR

Crises Many smaller Single/few GREY actions large actions ZONE

Crises "Normal" competition (e.g. economic competition, espionage)
PEACE

Figure 5.1: Peace, the Grey Zone and War

Box 5.1: What is the Grey Zone? The Five Multiples of the Grey Zone

(1) **Multiple levels:** The U.S. must successfully influence multiple societal levels, namely at the *state level* (e.g. adversarial, allied or neutral states); at the *population level* (e.g. mass communication within states and communities). State and population levels may, for example, view activities differently as legitimate reasons for war.

(2) *Multiple instruments of power*: Multiple classes of instruments—e.g. military, information, economic and cyber—cut across these multiple societal levels.

(3) Multiple timeframes: One must consider multiple separate timeframes, e.g. managing an ongoing process evolving over years; and managing short-term crises in light of that ongoing process. Persistent adversary subthreshold actions in cyber, for instance, can over time cumulatively present a serious threat. On longer timescales one must manage norms, arms races and extended influence.

(4) Multiple audiences: Ally and third party perceptions are critical in the Grey Zone – and U.S. actions will inevitably reach multiple audiences. For instance, if it lost allied support over the Korean Peninsula, the U.S could suffer deterrence by ally denial. See also the discussion of extended influence.

(5) *Multiple interpretations:* Ambiguity is a key feature of the Grey Zone. Ambiguity's essence is that events or actions are open to multiple interpretations.

THE REGION: LATEST HISTORICAL EPISODE OF GREY ZONE CONFLICT

- 5.6. We are not entering a "new Cold War", we are merely entering the latest epoch of Grey Zone conflict between great powers¹²⁰ of which many have occurred historically. The Cold War, as the name itself attests, was more than peaceful competition but was not a hot war between the West and the USSR.
- 5.7. During its unipolar moment after 1990 the U.S. faced no great power rivals. This gradually changed in the early 2000s with a resurgent Russia under Vladimir Putin and a rising China. Whilst choosing a precise tipping point is somewhat arbitrary, 2014 provides a natural juncture. 2014 saw Russia seize part of Ukraine, a country of some 50 million people for whom the U.S. had not long before been arguing for

¹²⁰ Grey Zone competition between great powers characterizes overarching historical epochs, but clearly such conflict may also occur between regional powers such as Saudi Arabia versus Iran. The DPRK, for instance, conducted Grey Zone competition during the Cold War and that continued during the unipolar post-Cold War U.S. moment.

NATO membership.¹²¹ Regarding China, Deng Xioping's reported dictum that China should "hide its light and bide its time" appeared to guide foreign policy from the 1980s. However, after Xi Jinping assumed power in 2012 China began to turn towards authoritarianism at home and a more assertive foreign policy abroad.¹²² Intensity of competition has increased in specific military flashpoints, notably in the East China sea with Japan¹²³ and the China South China Sea with numerous actors. This new foreign policy trajectory became increasingly apparent to outside observers between coming to office 2012 and Xi's 2017 speech confirming China's new course ¹²⁴ – precisely when to draw a line is difficult but 2014 provides a nice midway point in this period.

¹²¹ https://www.nytimes.com/2008/11/30/world/europe/30iht-nato.4.18268641.html

¹²² Elizabeth C. Economy, *The Third Revolution: Xi Jingping and the New Chinese State* (Oxford, New York: Oxford University Press, 2018).

¹²³ Wright and Schoff, "China and Japan's Real Problem."

¹²⁴ https://www.washingtonpost.com/news/monkey-cage/wp/2017/10/25/xi-jinping-just-made-it-clear-where-chinas-foreign-policy-is-headed/?utm_term=.fbed0092201d

Chapter 6: North Korea as a Grey Zone challenge

6.1. This chapter considers the DPRK challenge as one in the Grey Zone. This provides clear framework for considering the challenge using the "five multiples" of the Grey Zone. I consider how the DPRK has used these techniques, how they have been used against the DPRK and how they might be used now.¹²⁵

MULTIPLE INSTRUMENTS OF POWER

- 6.2. Multiple domains are important in the Grey Zone, which includes diplomatic, information, economic and cyber. It is important to coordinate U.S. actions across the *portfolio of actions* it has available, and respond coherently to the DPRK's use of its portfolio of actions. The U.S. and DPRK must engage their *"dueling portfolios."*¹²⁶
- 6.3. The DPRK has long conducted coordinated military-diplomatic campaigns.¹²⁷ It has more recently incorporated cyber. In the early days of the DPRK it used control of Seoul's power generation as a tool. It has long conducted aggressive covert activities, such as the 1970s and 80s abductions of Japanese citizens. Any discussion of its military options must consider conventional, nuclear and a large special forces contingent. The DPRK also, as described below, liberally used assassinations as a tool.
- 6.4. The DPRK has also been on the receiving end of actions through multiple instruments of power. The U.S. sanctions are a form of economic Grey Zone action, as were measures targeted at key regime members such as the 2017 seizure of DPRK funds from Macao's Banco Delta Asia. The ROK has used economic incentives as a source of influence, for example during the period of the "sunshine policy" earlier this century. As described below, the ROK has a long history of assassination threats against the DPRK

Assassinations and decapitation threats

6.5. South and North Korea have long used assassination and the threat of assassination as a tool of influence – and this continues to present times. In 2012 and 2013, for instance, South Korea made what has been interpreted as death threats: releasing footage of new ballistic and cruise missiles, alongside South Korean officials' assertions such as that South Korea's new cruise missile could "fly through Kim Jong Un's window."¹²⁸ There was discussion last year of the ROK setting up a military unit for decapitation.¹²⁹ The DPRK has also repeatedly made what are considered death threats. These are very alive given the historical background – recent President Park

¹²⁵ This chapter draws in parts on Wright, "From Control to Influence."; Wright, "Mindspace: Cognition in space operations".

¹²⁶ I thank John Lathrop for suggesting this term.

¹²⁷ Michishita, North Korea's Military-Diplomatic Campaigns, 1966-2008.

¹²⁸ https://www.38north.org/2013/02/jlewis022613/

¹²⁹ https://www.newsweek.com/south-koreas-decapitation-unit-will-take-down-north-korean-war-leadership-728642

Geun-hye's mother was killed in the 1970s by a North Korean assassin. Other cases include¹³⁰:

- 1968, Raid on the Blue House: A team of 31 North Korean commandos were sent to the South to infiltrate the Blue House (South Korea's presidential residence) and assassinate President Park Chung-hee.
- 1983, Bombing in Burma: A bomb hidden at the Martyrs' Mausoleum in Rangoon, the capital of Myanmar, exploded minutes before then South Korean President Chun Doo-hwan arrived to lay a wreath. Seventeen South Korean officials, including four ministers, were killed. Mr Chun's car was delayed in traffic, saving his life.
- 1996, A killing in Vladivostok: A South Korean consular official Choi Duk Keun's was found bludgeoned in October 1996, which South Korean media reports said was to avenge the deaths of 22 North Koreans in a submarine accident on a South Korean beach a month earlier.
- Targeting defectors: When Hwang Jang-yop, a senior politician, defected to South Korea in 1997, another prominent defector, Yi Han-yong, was shot in the head by suspected North Korean assassins. He was the nephew of Song Hye-rim, who is Kim Jong-nam's mother. Thirteen years later, two North Korean military officials posing as defectors were jailed in South Korea for an unsuccessful plot to kill Mr Hwang.
- 2017, Kim Jong-nam, the half-brother of North Korean leader Kim Jong-un, was killed in Malaysia.

MULTIPLE TIMESCALES

"You have to produce results in the short term. But you also have to produce results in the long term. And the long term is not simply the adding up of short terms." - Peter Drucker

- 6.6. One must consider at least three separate timeframes and U.S. success depends on success at all three. First, managing short-term crises in light of an ongoing process. Second, managing cumulative sequences of actions over an intermediate timescale of weeks or months. Third, managing an ongoing process evolving over years – a timescale on which norms are a crucial battleground, if DPRK can become a nuclear weapons state, then what is to prevent others from doing so?
- 6.7. Those who study the DPRK have considered some of these timeframes¹³¹, but U.S. success requires success in all three. I discuss each in turn.

Crisis management and recurrent crises in light of an ongoing process

6.8. Crisis management in terms of deterrence and escalation is covered in Part I, but an equally important part of escalation management is understanding what a crisis

¹³⁰ "North Korea's Foreign Assassinations," *BBC News*, February 14, 2017, sec. Asia, https://www.bbc.com/news/world-asia-38974455.

¹³¹ Recurrent crises are discussed in particular by Jackson, *Rival Reputations*. Short term success but mid- to long-term failure of DPRK provocations is noted in Michishita, *North Korea's Military-Diplomatic Campaigns*, *1966-2008*. p. 4.

means after it is over.¹³² Consider the series of crises in the decade before the start of the First World War. Each of the numerous series of crises was managed so it did not escalate to war. But the longer-term effect of each crisis was to escalate the Grey Zone conflict between the powers, crystallise alliances, increase arms racing and make each crisis more dangerous such that eventually a crisis did lead to war. We are not in currently at that heightened degree of tension, but if we must deal with recurrent crises then actions—and reactions—must be viewed not only in light of success in that one crisis but how affects longer-term norms and the international system.

Cumulative sequences of actions over time

- 6.9. Another crucial Grey Zone timeframe relates to cumulative sequences of actions over time, occurring over weeks, months or perhaps longer. No single example of the action may reach a threshold above "normal" competition between states, but cumulatively they push the activity over the threshold into the Grey Zone.
- 6.10. *Firstly, persistent adversary subthreshold actions can over time cumulatively present a serious threat.* An example in cyber is the Advanced Persistent Threat, where each individual action may not be greater than an act of espionage consistent with normal competition but taken together they pose a significant threat. Persistent actions over time, whilst each may not constitute an event serious enough to require a robust response, may form a sequence that requires a robust response even though such a response may be perceived as disproportionate in response to the single adversary action.
- 6.11. Recommendation:
 - Ahead of time communicate that persistent threats will be seen as a cumulative threat and be responded to as such.
 - > Discuss strategies to counter such threats with allies, e.g. Japan.
- 6.12. Secondly, "salami slicing" is a famous cumulative tactic, whereby an adversary aims to achieve a goal through multiple small slices none of which is sufficiently large to provoke a response. A contemporary case is the PRC's extension of influence in the South China Sea, for example through gradual island building and militarization.

Managing an ongoing process over years

6.13. International systems go through years of Grey Zone conflicts or even decades: the Cold War lasted some four decades and as its name suggests was less than war but more than peace. I note three areas on this timescale.

Norms and norm change - the neural phenomenon of "prediction error"

6.14. Managing change is key to the international system. Change will always occur, for example through technological or economic drivers. Failure to manage change can lead to war. Norms are the "rules of the road" in the international system and are key

¹³² Richard N. Rosecrance and Steven E. Miller, *The Next Great War?: The Roots of World War I and the Risk of U.S.-China Conflict*, 1 edition (Cambridge, MA: MIT Press, 2015).

to its day-to-day functioning. Managing potential changes in norms is critical in the Grey Zone, and indeed rejecting current Western-based norms is a key aim of both Russian and PRC Grey Zone activities.

- 6.15. Using norms is a key area of difference for DPRK Grey Zone activities compared to Russia or China. As a smaller power, it does not necessarily aim to change norms. Instead it has been argued that a key feature of DPRK strategy is to hide behind the rules of the international system.¹³³ Clearly, however, the precedents from DPRK Grey Zone actions, including proliferation, can contribute to changing norms.
- 6.16. Firstly, cognitive science gives one source of insight into how norms change. The neural phenomenon of "prediction error" is critical to how humans change their expectations about the world unexpected events that violate norms change those norms. The U.S. must manage unexpectedness and unpredictability in the Grey Zone.
 - Breaking a norm can be deliberate, to shock. Soviet leader Nikita Khrushchev banging his shoe on the table in the UN. Chinese leader Deng Xiaoping hugging the prime minister of Japan. Saddam Hussein's use of chemical weapons. Syrian regime use of chemical weapons.
 - Salami slicing and ambiguity can be used to change norms without causing significant prediction error and thus less psychological impact.
- 6.17. Secondly, U.S. decision-makers must be aware that each episode in the Grey Zone sets the stage for the next interaction. Violating norms, even for admirable reasons, can escalate Grey Zone conflict on a longer timeframe.
- 6.18. Third, norms inherently stem from the perceptions of multiple actors. If the U.S. wishes to shape norms in its preferred direction, it needs allied support.

Extended deterrence and influence over time

6.19. Convincing allied elites and publics of the legitimacy of U.S. actions—as well as that the U.S. will fulfil extended deterrence guarantees—critically involves messengers that are trusted and credible to the target audience. Trust is fundamentally psychological, and trusted messengers can often only be created with over longer timeframes (e.g. military-to-military relationships, the BBC).

MULTIPLE LEVELS

- 6.20. The U.S. must successfully influence multiple societal levels, most notably at the *state level* (e.g. adversarial, allied or neutral states) and at the *population level* (e.g. mass communication within states and communities). For example, the public may not see DPRK activities as legitimate reason for war, constraining decision-makers.
- 6.21. **Considering multiple levels suggests ways to influence the DPRK**. Regime stability is paramount, and the U.S. can threaten the DPRK with concerted direct information operations targeting its population.
 - Build and enhance messengers to reach the DPRK population: E.g. memory sticks; DVDs; radio; through family links to the ROK or China.

¹³³ Michishita, North Korea's Military-Diplomatic Campaigns, 1966-2008.

- Create messaging specifically for DPRK audiences: Programming content that directly relates to the lives of north Koreans – mostly entertainment or news, but gradual anti-regime content. Similarity of audience and messenger is key, so use north Korean and south Korean content.
- Understand the North Korean audience are there key segments that can be mobilized? The 'Checklist for empathy' in Chapter 2 provides a realistic analysis of audiences, which includes key human motivations such as fairness, legitimacy, surprise and self-interest.

MULTIPLE INTERPRETATIONS

- 6.22. Ambiguity is central to DPRK actions in the Grey Zone. For example, in the nuclear programme what is meant by terms such as denuclearization? Initially there was ambiguity in attribution of the 2010 Cheonan sinking. The dual use nature of many technologies is highly problematic for any verifiable arms control.
- 6.23. Recommendation:
 - "Trust but verify" is a famous dictum, and the DPRK will require greater trust building to compensate for difficulties in verification.
 - How can the U.S. persuade others of U.S. interpretations of ambiguous events in key audiences, such as ROK or Japanese elite and public opinion? Key here is U.S. building and using messengers that are trusted by these audiences. This is often a long-term process, such as building up public diplomacy and soft power.¹³⁴

MULTIPLE AUDIENCES

- 6.24. As a "shrimp amongst whales", manipulating multiple audiences has been central to North Korean strategy. During the Cold War the DPRK deftly played off the PRC and Soviet Union – indeed, the one much vaunted PRC treaty was only after the Soviet Union signed a similar treaty. The DPRK is now held to be carefully attempting to drive wedges between the US and its allies the ROK and Japan.
- 6.25. Ally and third-party perceptions are critical in the Grey Zone and U.S. actions will inevitably reach multiple audiences. If the U.S. lost allied support for the Korean Peninsula, for instance, it could suffer deterrence by ally denial.
- 6.26. Audience analysis is critical across these multiple audiences.
- 6.27. Recommendation:
 - Audience analysis requires both local knowledge within key local audiences, and also the ability of the U.S. analysts to put themselves in the shoes of their audiences – the type of 'outside-in' thinking enabled by our *Checklist for Empathy* (Box 1.1).

¹³⁴ Wright, "From Control to Influence." Chapter 4 describes multiple evidence-based ways to develop and find trusted messengers.